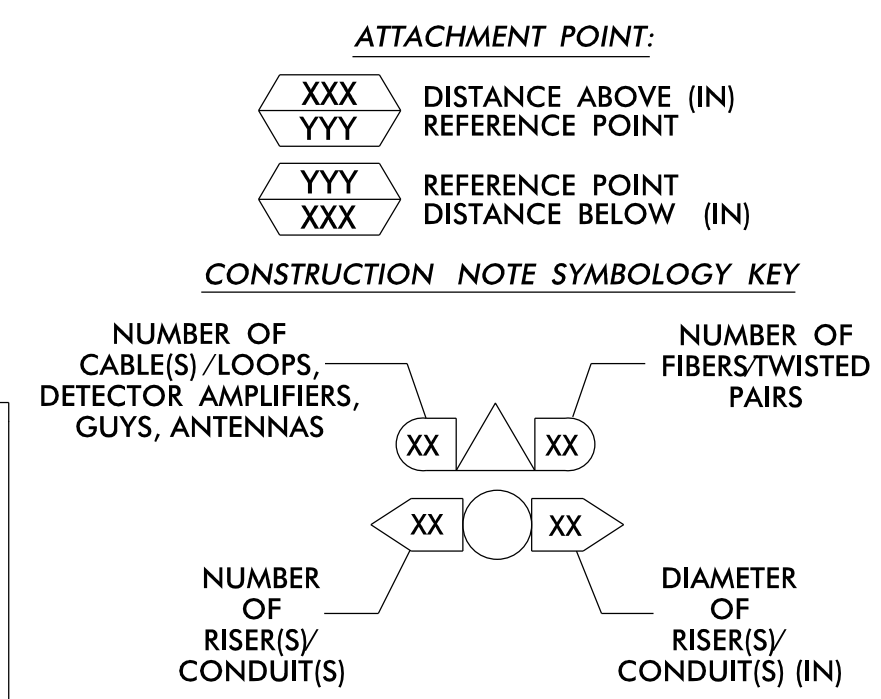


- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE: 1"=50'

750 Greenfield Parkway, Garner, NC 27529

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

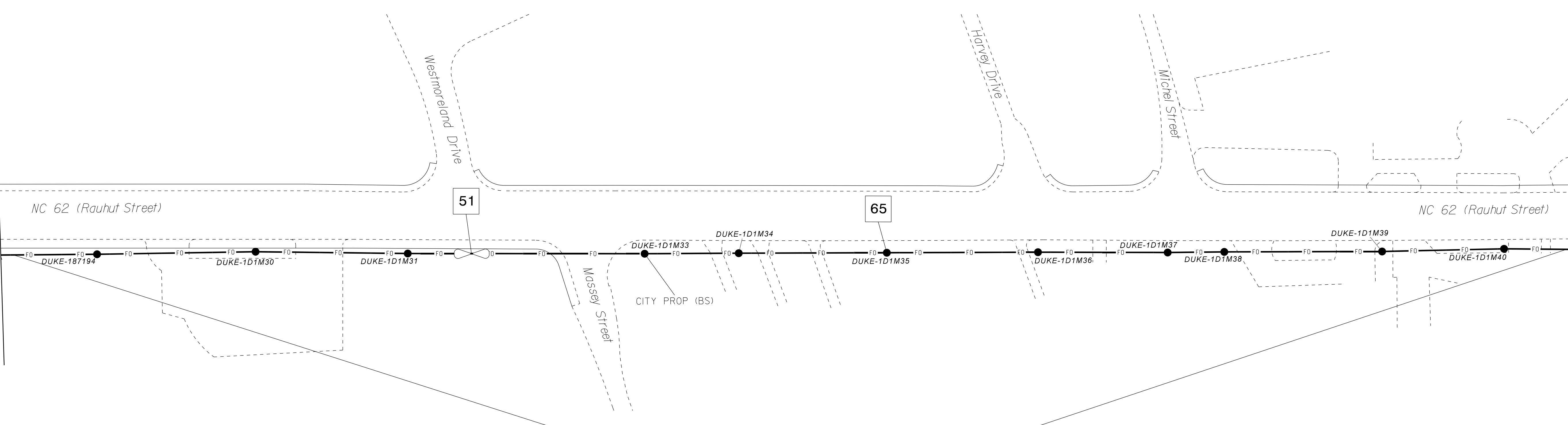
Melissa B. Toth 6/13/2018

CADD File name: CL-158.dgn

13-JUN-2018 15:45
0:\Projects\2018\11\11\Task\11_11\Task\11_11_158.dgn
ENC45386 AT LUS330048

MATCHLINE - SHEET CRP-6.158

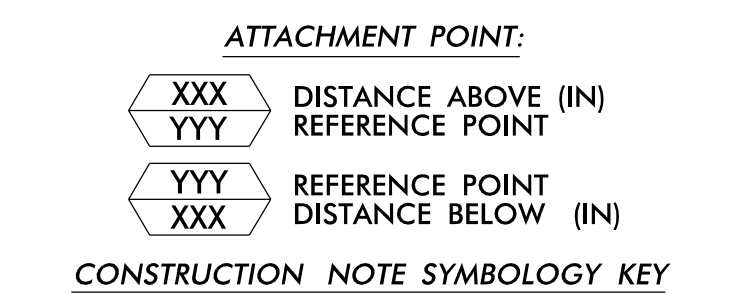
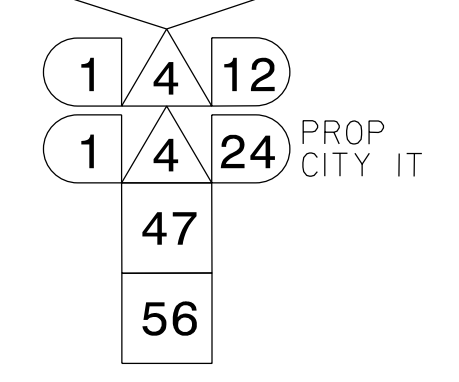
MATCHLINE - SHEET CRP-6.160



NOTES:
1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

13-JUN-2018 15:45
D:\Projects\2018\159\159.dgn
ENC45386

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

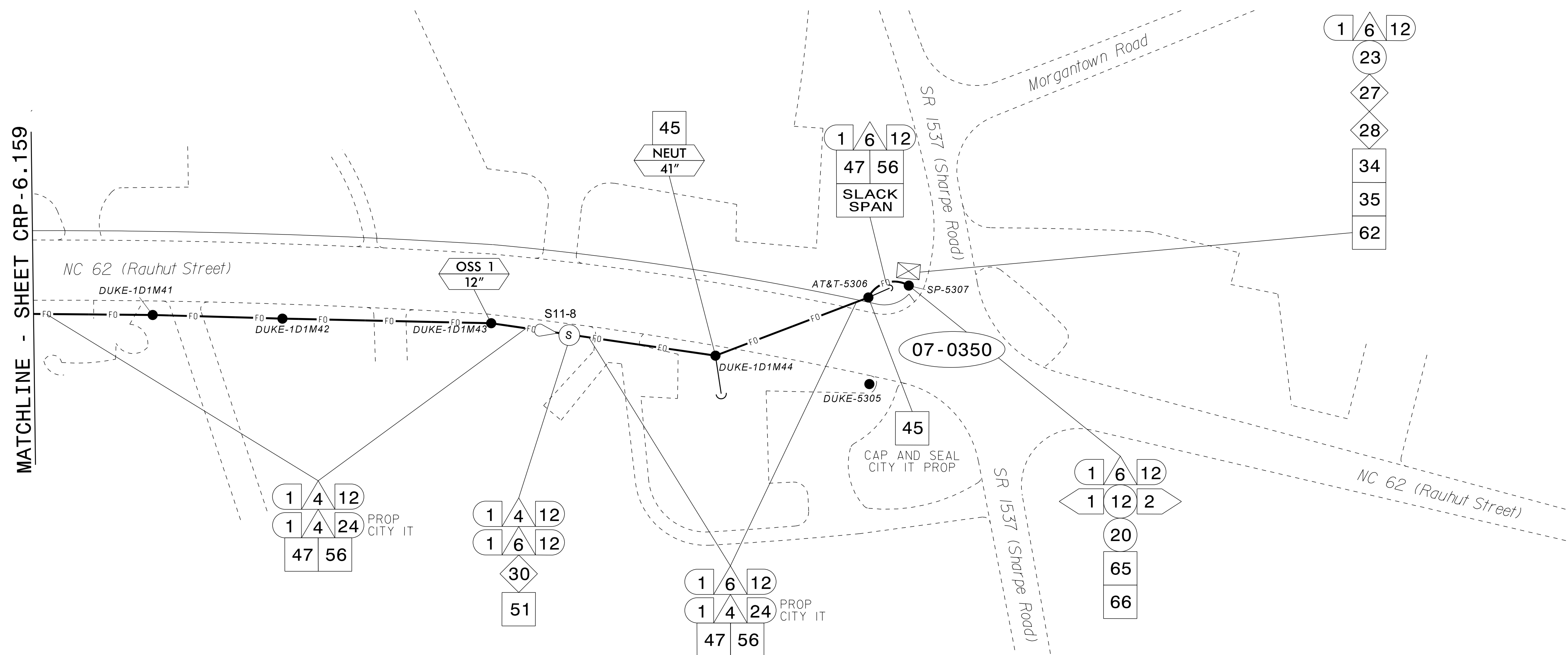
REVISIONS INIT. DATE

SCALE 0 50 1"=50'

750 Greenfield Parkway, Garner, NC 27529

Melissa B. Toth 1/13/2018

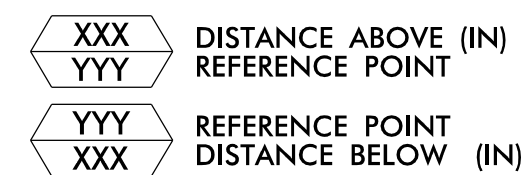
CL-159.dgn



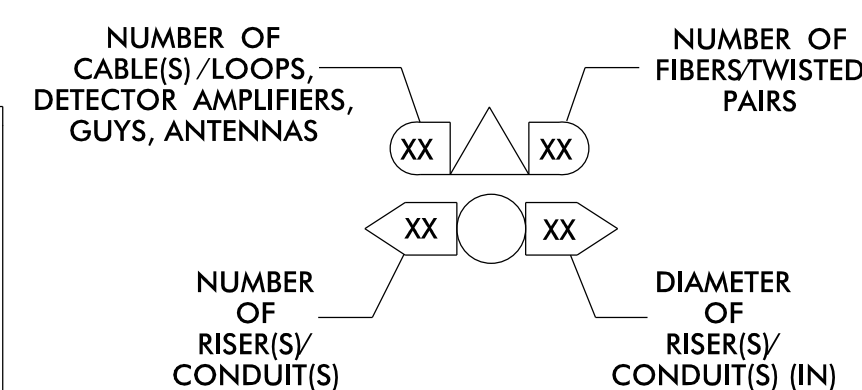
NOTES:

- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

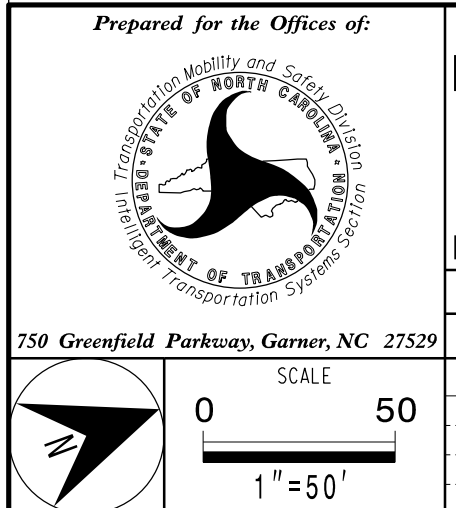


CONSTRUCTION NOTE SYMBOLOLOGY KEY



1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/SCORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326



Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

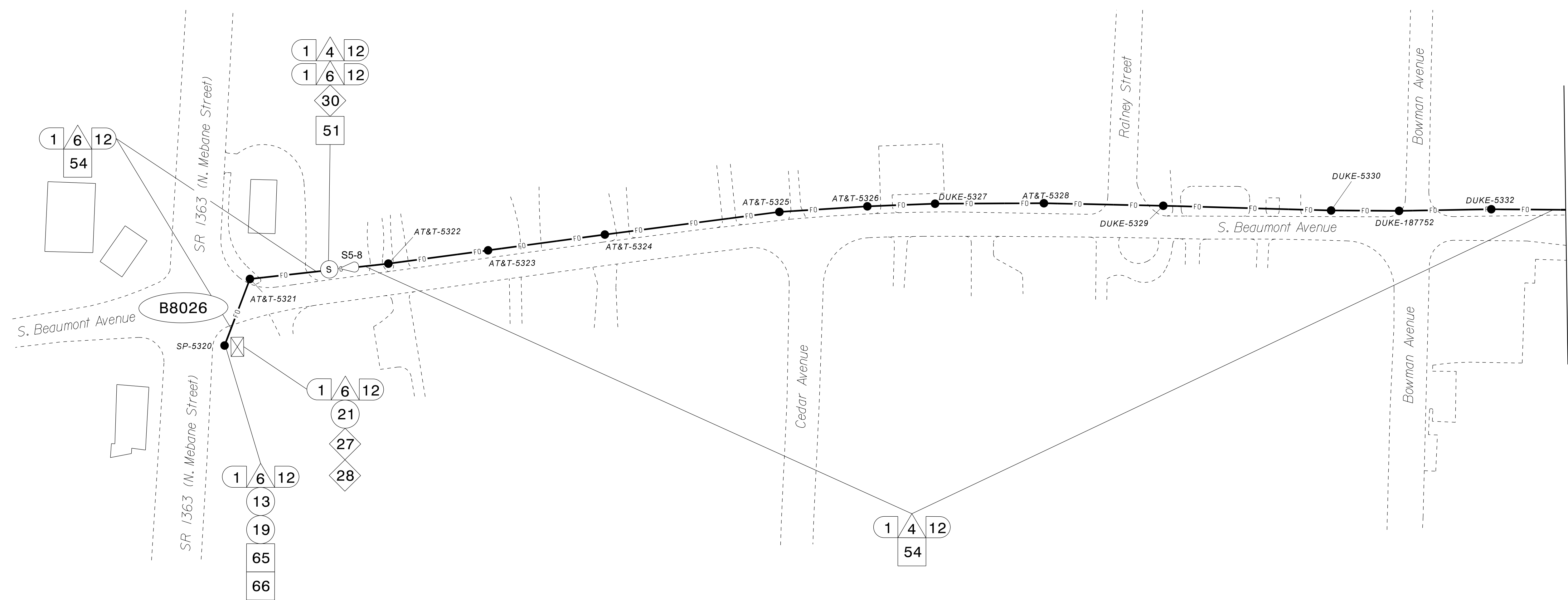
PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

REVISIONS: INIT. DATE

DocuSign by: Melissa B. Toth 08/08/2018

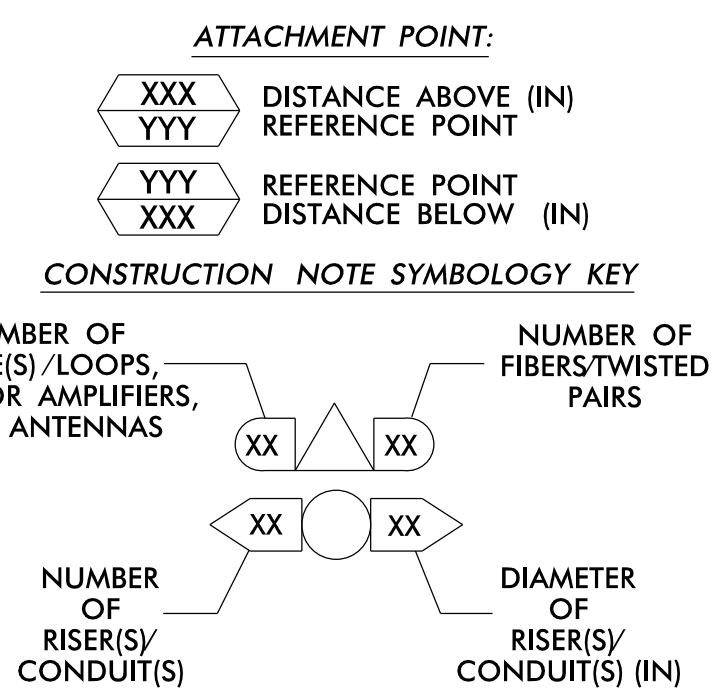
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

13-JUN-2018 15:45
D:\Projects\Burlington-Graham Signal System\11-CL-160.dgn
ENC45386 AT LUS330048



MATCHLINE - SHEET CRP-6.036

NOTES:
1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1. INSTALL CATEGORY 6 CABLE	11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22. INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32. MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43. REMOVE EXISTING WOOD POLE	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE	66. BOND RISER TO POLE GROUND
2. INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12. INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23. INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33. REMOVE EXISTING SPLICE /HUB / CCTV CABINET	44. INSTALL AERIAL GUY ASSEMBLY	56. LASH CABLE(S) TO NEW MESSENGER CABLE	67. BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3. INSTALL COMPOSITE CCTV CABLE	13. INSTALL HEAT SHRINK TUBING KIT	24. INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34. INSTALL CABINET FOUNDATION	45. INSTALL STANDARD GUY ASSEMBLY	57. MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68. BOND TRACER WIRE TO POLE GROUND
4. INSTALL SMFO CABLE	14. INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25. INSTALL NEW RISER INTO POLE MOUNTED CABINET	35. REMOVE EXISTING CABINET FOUNDATION	46. INSTALL SIDEWALK GUY ASSEMBLY	58. INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69. HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5. INSTALL COAXIAL ANTENNA CABLE	15. DIRECTIONAL DRILL CONDUIT	26. INSTALL DIGITAL VIDEO ENCODER	36. INSTALL CCTV CAMERA ASSEMBLY	47. INSTALL MESSENGER CABLE	59. INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70. INSTALL CCTV CABINET DISCONNECT
6. INSTALL FIBER-OPTIC DROP CABLE	16. BORE AND JACK CONDUIT	27. INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37. INSTALL CCTV WOOD POLE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60. INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71. INSTALL MANAGED ETHERNET SWITCH
7. INSTALL TRACER WIRE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	28. INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38. INSTALL STANDARD SIZE JUNCTION BOX	49. REMOVE EXISTING COMMUNICATIONS CABLE	60A. INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72. INSTALL CCTV METAL POLE
8. INSTALL CONDUIT UNDERGROUND	18. INSTALL CABLE(S) IN NEW CONDUIT	29. INSTALL UNDERGROUND SPLICE ENCLOSURE	39. INSTALL SPECIAL-SIZED JUNCTION BOX	50. INSTALL SERVICE CONDUCTORS	61. REMOVE EXISTING CCTV CAMERA ASSEMBLY	73. REMOVE EXISTING CCTV METAL POLE
9. INSTALL PVC CONDUIT	19. INSTALL CABLE(S) IN EXISTING RISER(S)	30. INSTALL AERIAL SPLICE ENCLOSURE	40. INSTALL OVER-SIZED JUNCTION BOX	51. INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62. NEW CABINET ENTRANCE INTO NEW FOUNDATION	74. REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	20. INSTALL CABLE(S) IN NEW RISER(S)	31. INSTALL SPLICE CABINET	41. REMOVE EXISTING JUNCTION BOX	52. INSTALL DELINEATOR MARKER	63. DRILL/CORE DRILL EXISTING FOUNDATION	75. BACKPULL AND COIL CITY IT CABLE
	21. INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE		42. INSTALL WOOD POLE	53. STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64. INTERCEPT AND REROUTE EXISTING CONDUITS	76. INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54. LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65. BOND MESSENGER TO POLE GROUND	77. INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 878-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

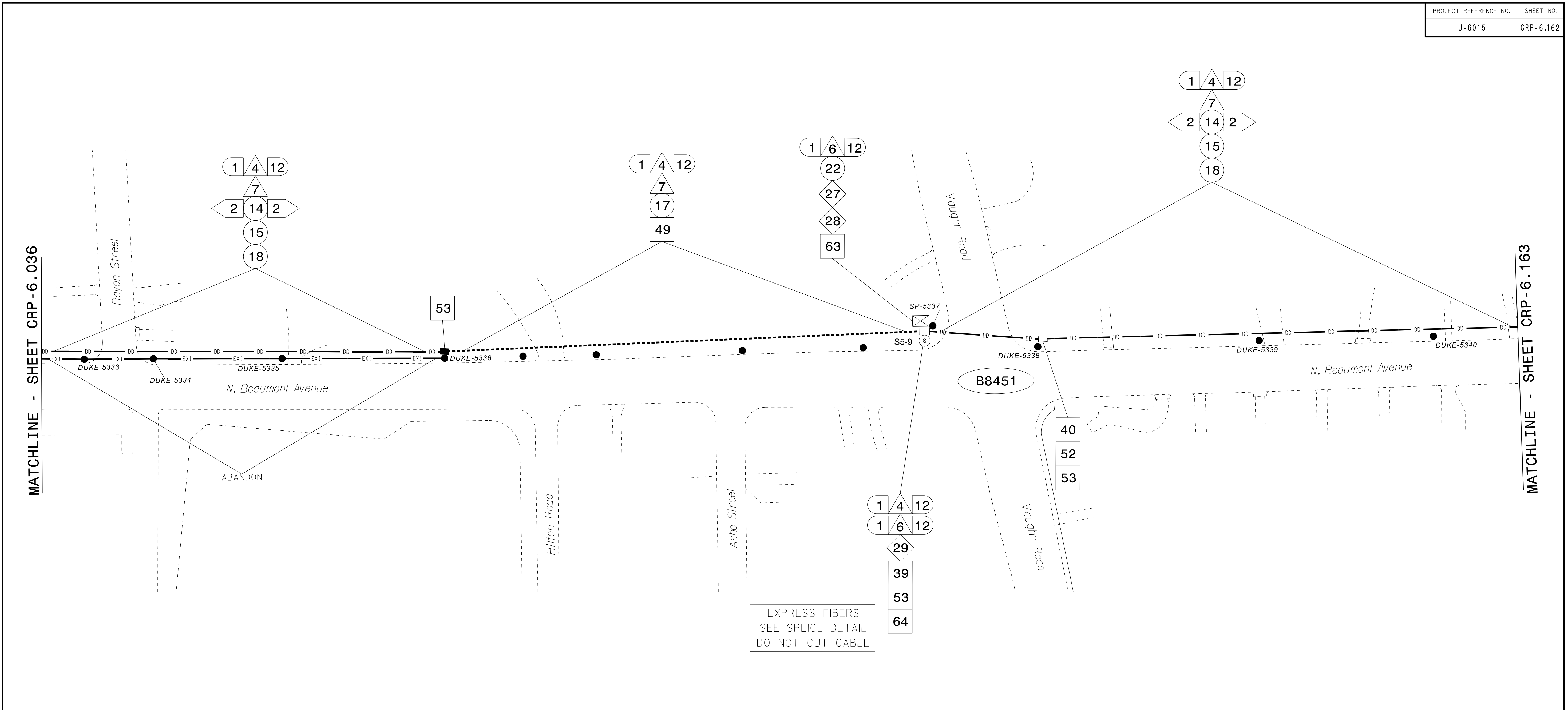
750 Greenfield Parkway, Garner, NC 27529

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

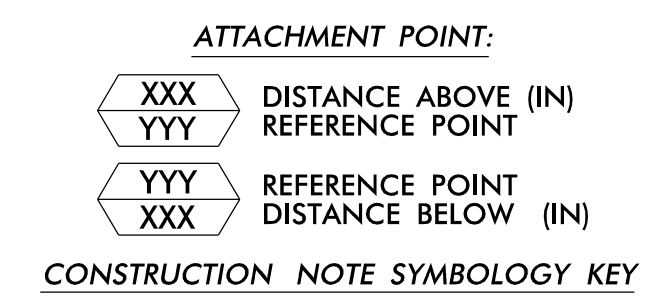
CADD File name: CL-161.dgn

13-JUN-2018 15:45
0:\projects\p01\loc\t\loc\t\c\cur\100056469 U-6015 B-G Sig Sys\Task 11_CL161-161.dgn
ENC45386 AT LUS333048



EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE

- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 State of North Carolina
 Department of Transportation

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

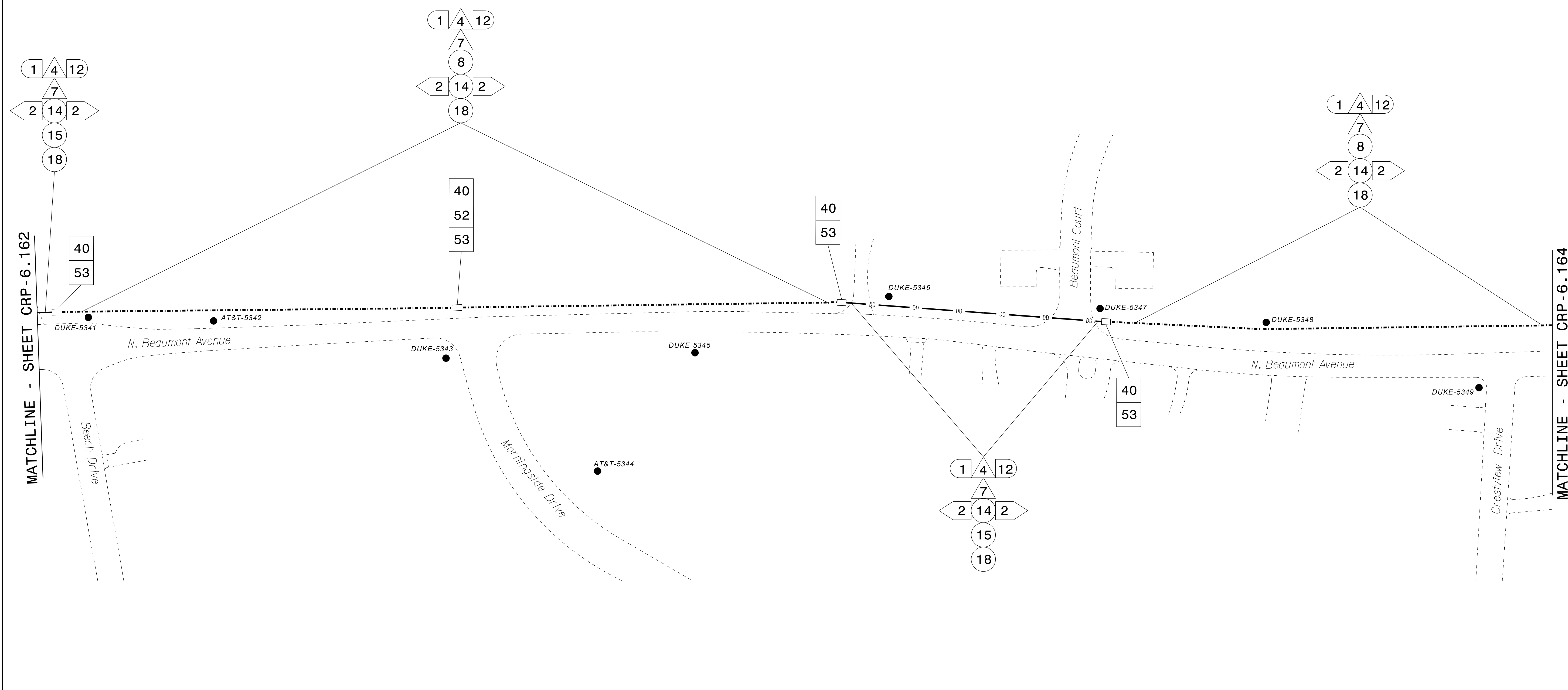
REVISIONS INIT. DATE

SCALE 0 50
1"=50'

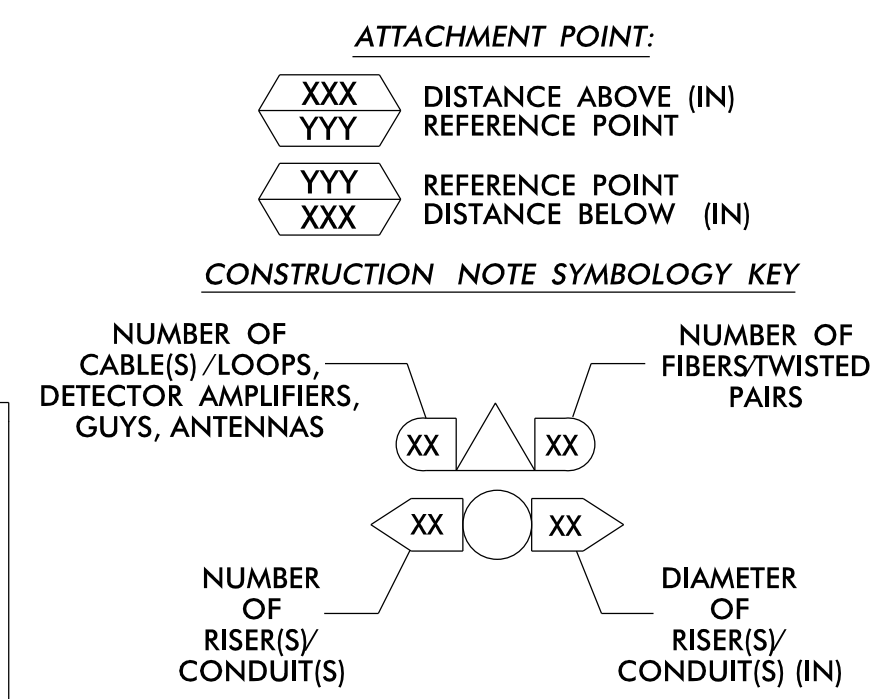
DocuSign by: Melissa B. Toth 11/13/2018
0980CF8E04044F DATE

CADD File name: CL-162.dgn

13-JUN-2018 15:45
0:*\TCDSP001\TCDSP001\U-6015 B-G Sigr Sys\Task 11...CL-162.dgn
ENC45396 AT LUS330048



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Prepared for the Offices of:

 Department of Transportation and Safety, State of North Carolina

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

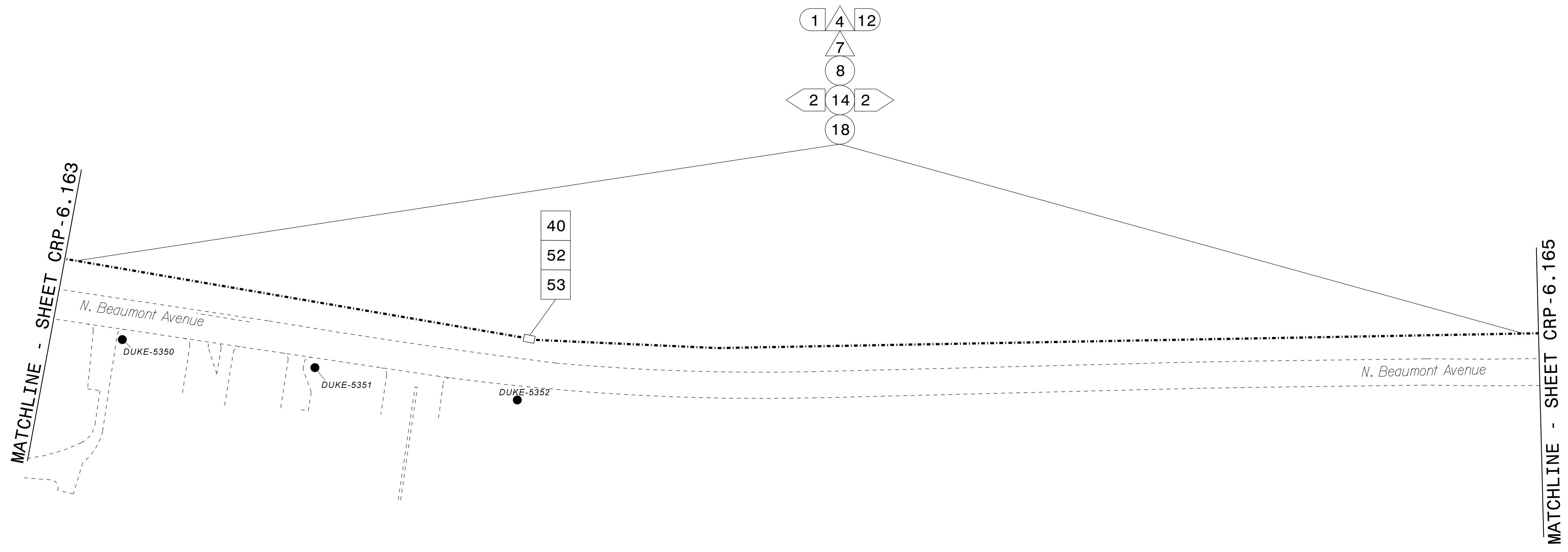
SCALE 0 50 1"=50'

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 11/13/2018

CADD File name: CL-163.dgn

13-JUN-2018 15:45
01:10:00 PLOT: C:\Users\Tjoffi\OneDrive\Documents\11-CL-163.dgn
ENC45386 AT LUS330048



- NOTES:
1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

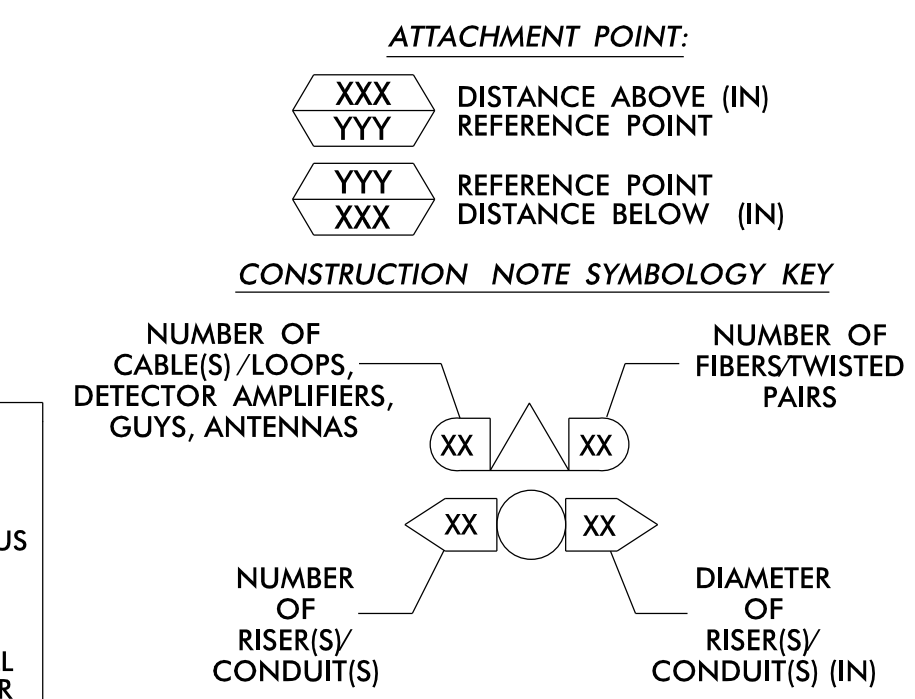
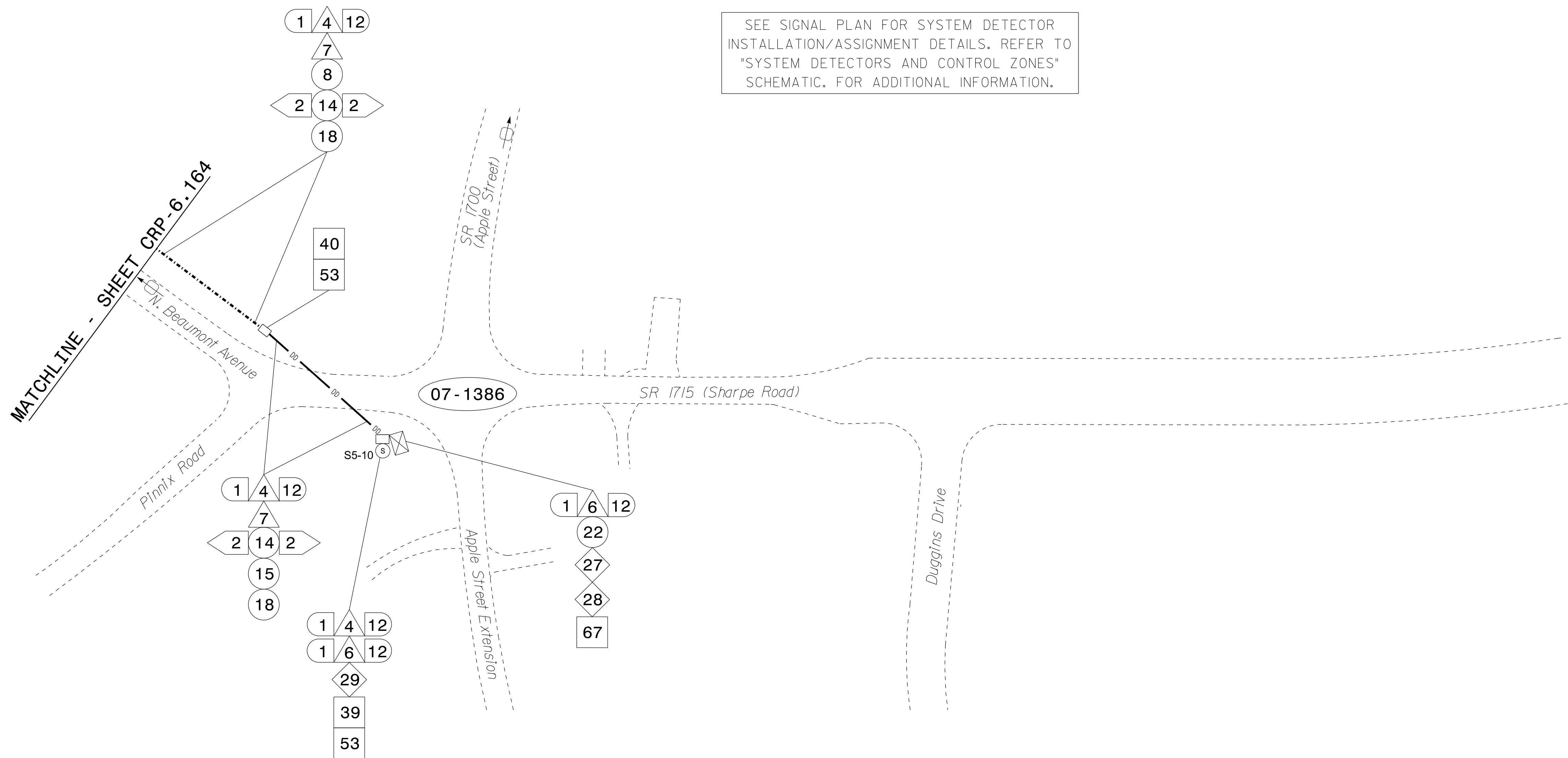


Table with 10 columns and 2 rows of callout symbols and their corresponding descriptions, such as 'INSTALL CATEGORY 6 CABLE', 'REMOVE EXISTING WOOD POLE', and 'INSTALL AERIAL GUY ASSEMBLY'.

Project information block including the Atkins logo, project name 'Burlington-Graham Signal System Cable Routing Plans', division details, plan date (June 2018), and a professional seal for Melissa B. Toth.

13-JUN-2018 15:45
0:\projects\2018\11-CL-164.dgn
ENC45386
AT LUS333048



NOTES:

1. UNLESS OTHERWISE NOTED:

- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.

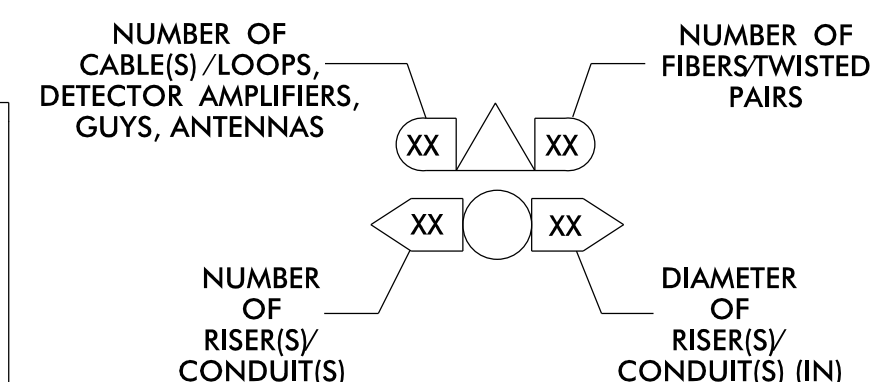
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64	INTERCEPT AND REROUTE EXISTING CONDUITS	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65	BOND MESSENGER TO POLE GROUND	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATTACHMENT POINT:



CONSTRUCTION NOTE SYMBOLOLOGY KEY



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

750 Greenfield Parkway, Garner, NC 27529

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

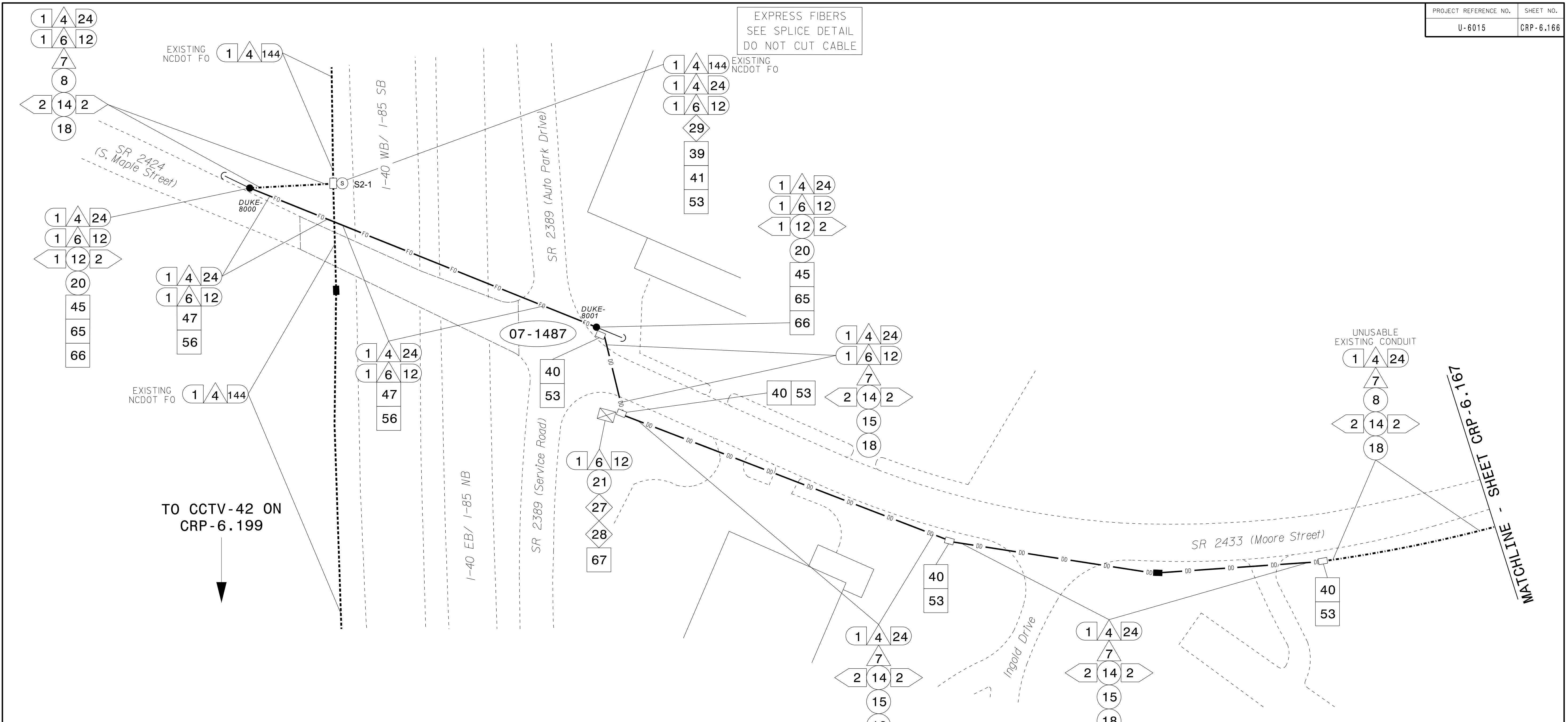
PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS	INIT.	DATE

Melissa B. Toth 13/2018

SCALE: 1"=50'

13-JUN-2018 15:45
 01:10:00 PLOT FOR OFFICE USE ONLY
 AT LUS3330048



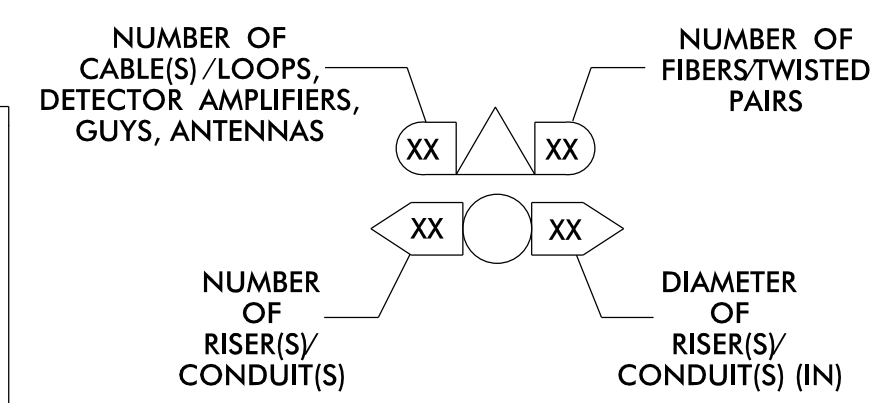
- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN) REFERENCE POINT

YYY
XXX REFERENCE POINT DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 State of North Carolina
 Department of Transportation

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

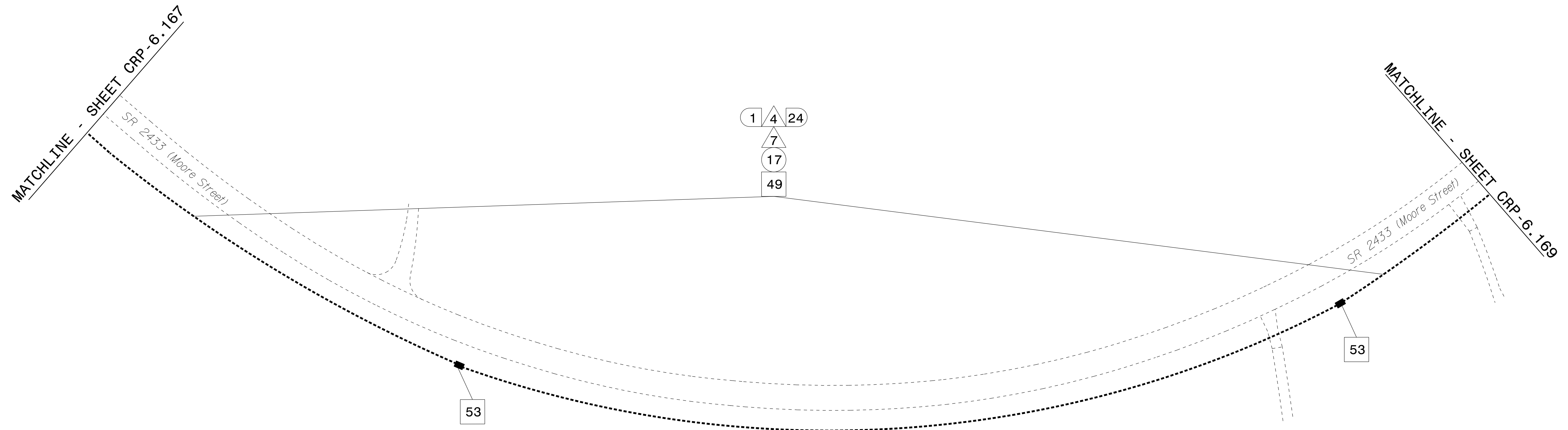
SCALE: 1"=50'

750 Greenfield Parkway, Garner, NC 27529

DocuSign by: Melissa B. Toth 6/13/2018

CADD File name: CL-166.dgn

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
	21 INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE		42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

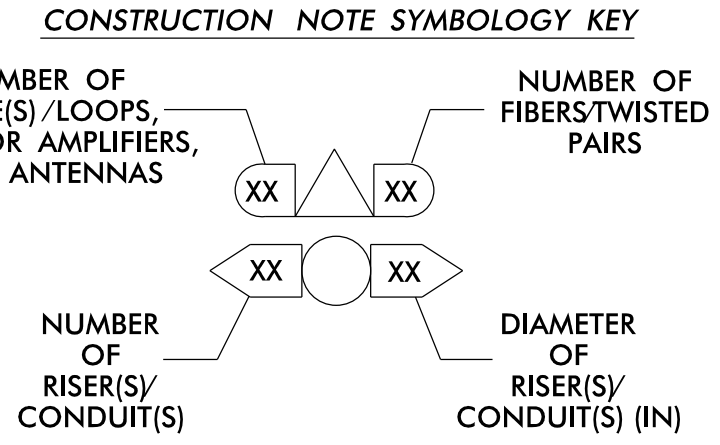
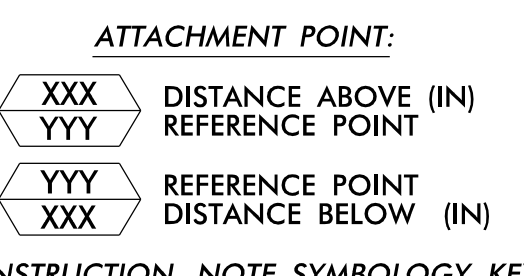


NOTES:

- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

13-JUN-2018 15:45
0:\work\2018\1545\45\crp-6.168.dgn
ENC45386

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE /HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 878-6888 NCBEEB #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth B J Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

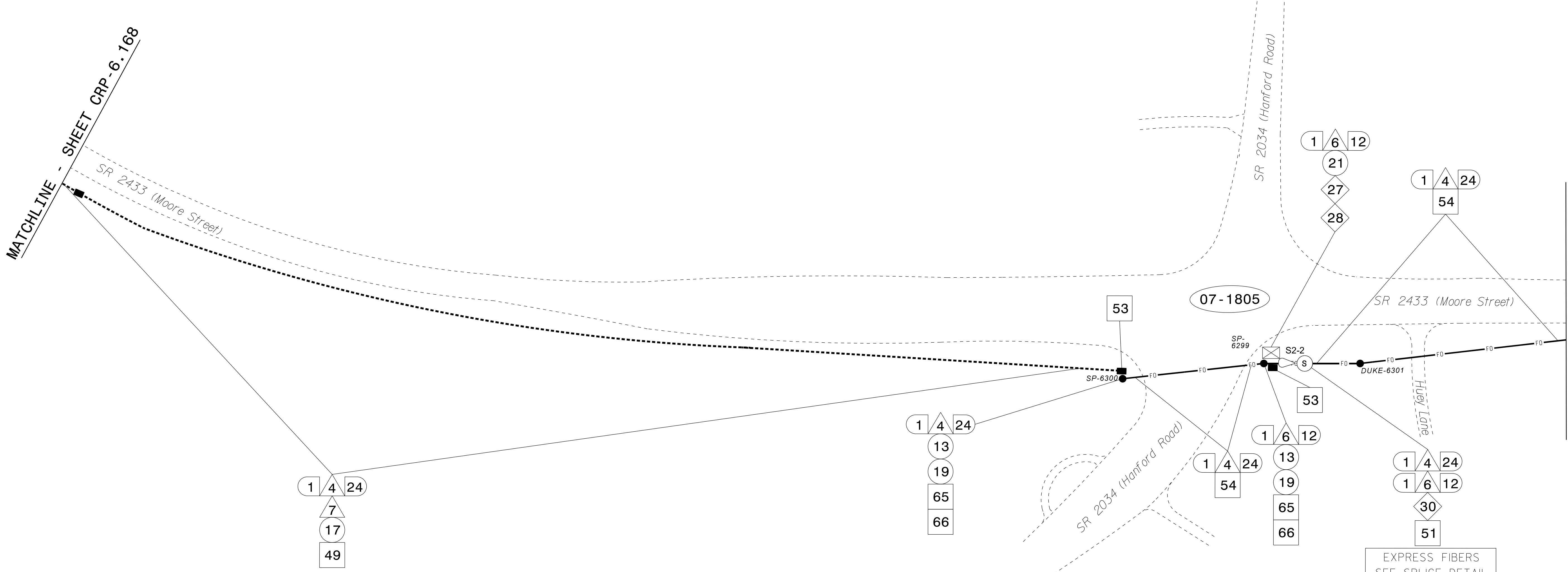
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 6/13/2018

CADD Filename: CL-168.dgn

MATCHLINE - SHEET CRP-6.168
SR 2433 (Moore Street)

MATCHLINE - SHEET CRP-6.170



NOTES:

1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:
XXX DISTANCE ABOVE (IN) REFERENCE POINT
YYY REFERENCE POINT
YYY REFERENCE POINT
XXX DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64	INTERCEPT AND REROUTE EXISTING CONDUITS	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65	BOND MESSENGER TO POLE GROUND	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS
1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-8888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Division 7 Alamance County
Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham
PLAN DATE: June 2018 REVIEWED BY: M B Toth
PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum
REVISIONS INIT. DATE

750 Greenfield Parkway, Garner, NC 27529
SCALE 1"=50'

Melissa B. Toth
Professional Engineer
025892
1/13/2018
DATE

13-JUN-2018 15:45
D:\work\proj\10056469 U-6015 B-G Sig System\Task 11_CAD\CL-169.dgn
ENC45396 AT LUS331048

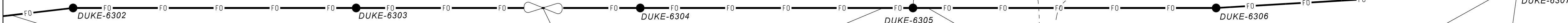
MATCHLINE - SHEET CRP-6.169

MATCHLINE - SHEET CRP-6.171

SR 2433 (Moore Street)

CITY SAME

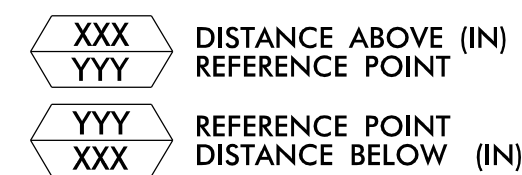
SR 2433 (Moore Street)



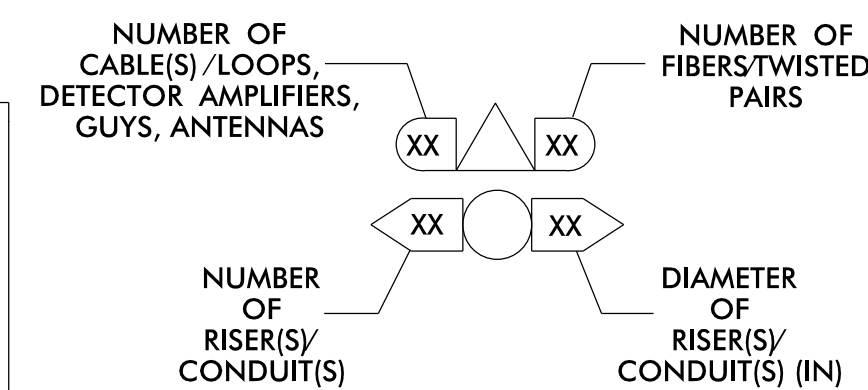
NOTES:

- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:



CONSTRUCTION NOTE SYMBOLOLOGY KEY



1. INSTALL CATEGORY 6 CABLE	11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22. INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32. MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43. REMOVE EXISTING WOOD POLE	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE	66. BOND RISER TO POLE GROUND
2. INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12. INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23. INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33. REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44. INSTALL AERIAL GUY ASSEMBLY	56. LASH CABLE(S) TO NEW MESSENGER CABLE	67. BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3. INSTALL COMPOSITE CCTV CABLE	13. INSTALL HEAT SHRINK TUBING KIT	24. INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34. INSTALL CABINET FOUNDATION	45. INSTALL STANDARD GUY ASSEMBLY	57. MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68. BOND TRACER WIRE TO POLE GROUND
4. INSTALL SMFO CABLE	14. INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25. INSTALL NEW RISER INTO POLE MOUNTED CABINET	35. REMOVE EXISTING CABINET FOUNDATION	46. INSTALL SIDEWALK GUY ASSEMBLY	58. INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69. HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5. INSTALL COAXIAL ANTENNA CABLE	15. DIRECTIONAL DRILL CONDUIT	26. INSTALL DIGITAL VIDEO ENCODER	36. INSTALL CCTV CAMERA ASSEMBLY	47. INSTALL MESSENGER CABLE	59. INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70. INSTALL CCTV CABINET DISCONNECT
6. INSTALL FIBER-OPTIC DROP CABLE	16. BORE AND JACK CONDUIT	27. INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37. INSTALL CCTV WOOD POLE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60. INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71. INSTALL MANAGED ETHERNET SWITCH
7. INSTALL TRACER WIRE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	28. INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38. INSTALL STANDARD SIZE JUNCTION BOX	49. REMOVE EXISTING COMMUNICATIONS CABLE	60A. INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72. INSTALL CCTV METAL POLE
8. INSTALL CONDUIT UNDERGROUND	18. INSTALL CABLE(S) IN NEW CONDUIT	29. INSTALL UNDERGROUND SPLICE ENCLOSURE	39. INSTALL SPECIAL-SIZED JUNCTION BOX	50. INSTALL SERVICE CONDUCTORS	61. REMOVE EXISTING CCTV CAMERA ASSEMBLY	73. REMOVE EXISTING CCTV METAL POLE
9. INSTALL PVC CONDUIT	19. INSTALL CABLE(S) IN EXISTING RISER(S)	30. INSTALL AERIAL SPLICE ENCLOSURE	40. INSTALL OVER-SIZED JUNCTION BOX	51. INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62. NEW CABINET ENTRANCE INTO NEW FOUNDATION	74. REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	20. INSTALL CABLE(S) IN NEW RISER(S)	31. INSTALL SPLICE CABINET	41. REMOVE EXISTING JUNCTION BOX	52. INSTALL DELINEATOR MARKER	63. DRILL/CORE DRILL EXISTING FOUNDATION	75. BACKPULL AND COIL CITY IT CABLE
			42. INSTALL WOOD POLE	53. STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64. INTERCEPT AND REROUTE EXISTING CONDUITS	76. INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54. LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65. BOND MESSENGER TO POLE GROUND	77. INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-8888 NCBEES #F-0326

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS	INIT.	DATE

SEAL

Melissa B. Toth 1/13/2018

750 Greenfield Parkway, Garner, NC 27529

SCALE: 0 50 1"=50'

13-JUN-2018 15:45
0:\work\proj\100056469 U-6015 B-G Sig Sys\Task 11_C1\CL-170.dgn
ENC45396 AT LUS330048

MATCHLINE - SHEET CRP-6.170

SR 2433 (Moore Street)

Chandler Village Drive

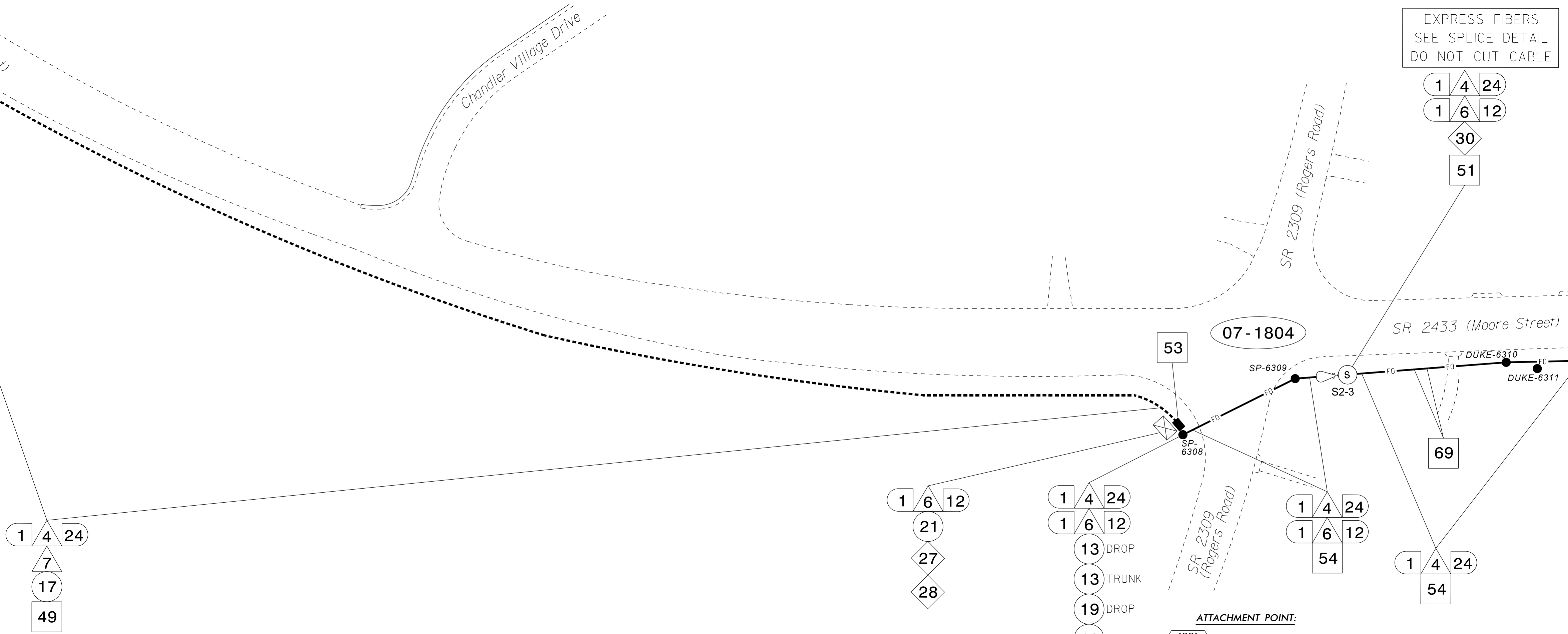
SR 2309 (Rogers Road)

EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE

07-1804

SR 2433 (Moore Street)

MATCHLINE - SHEET CRP-6.172

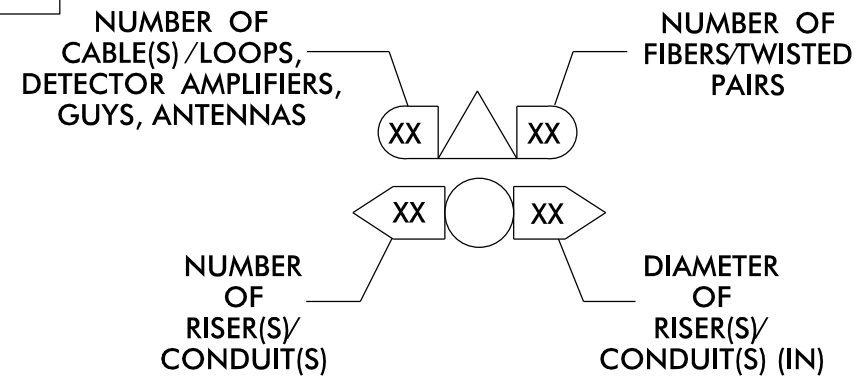


NOTES:

1. UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:
 XXX DISTANCE ABOVE (IN)
 YYY REFERENCE POINT
 YYY REFERENCE POINT
 XXX DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
	21 INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE		42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

750 Greenfield Parkway, Garner, NC 27529

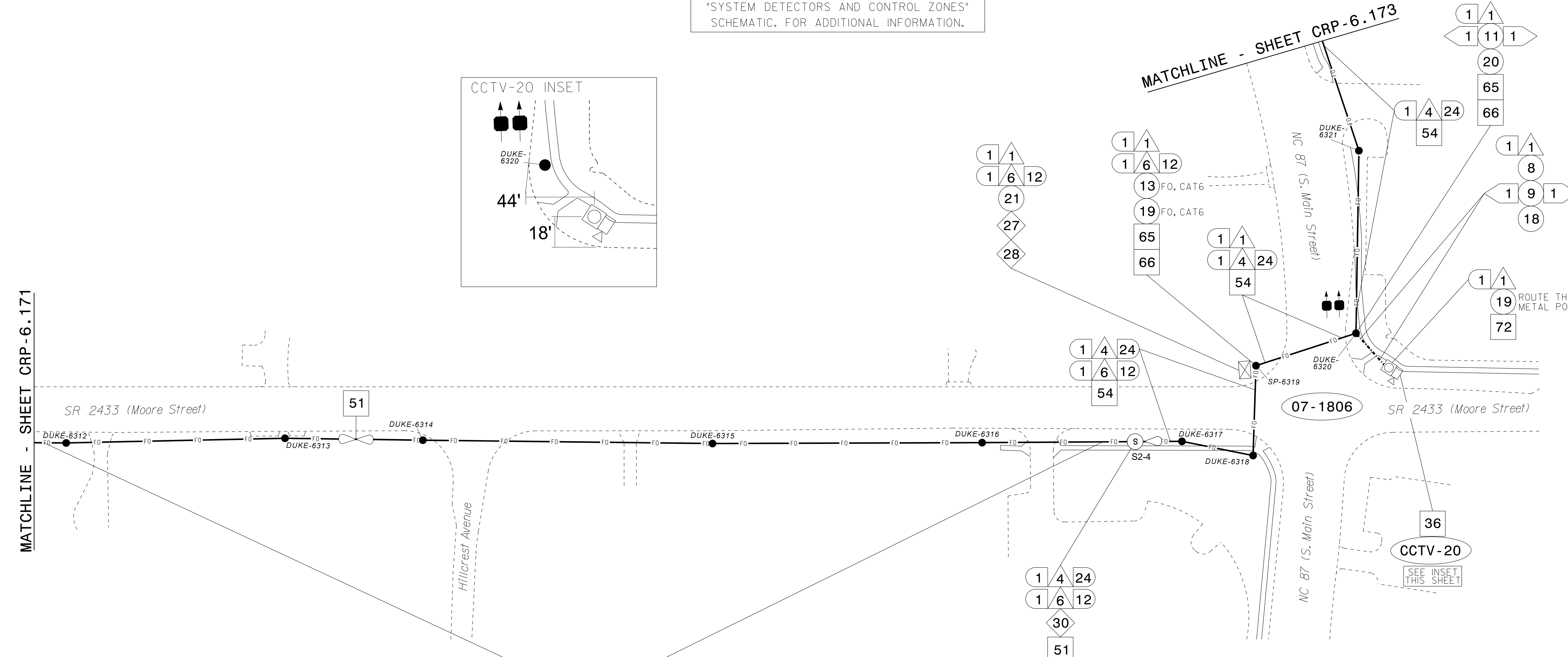
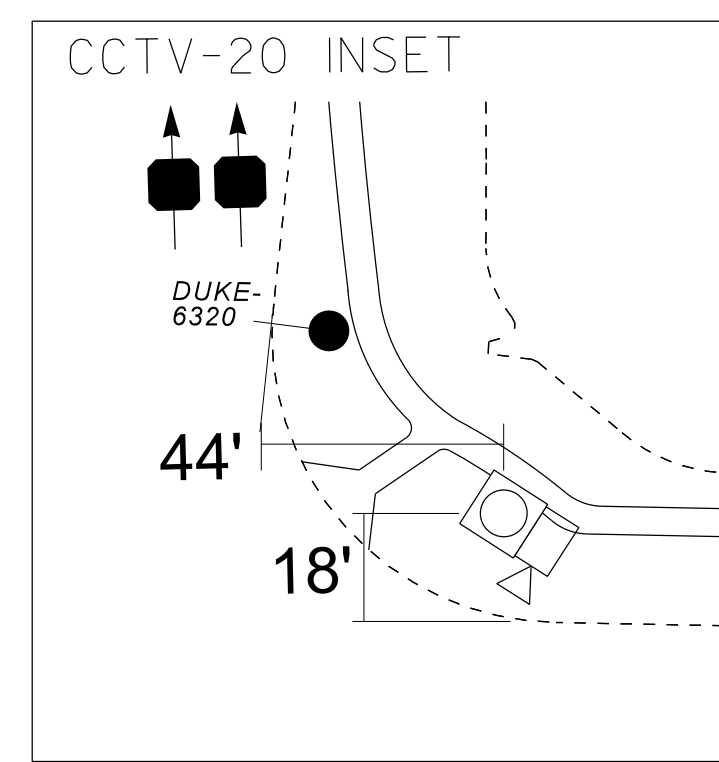
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

DocuSign by: Melissa B. Toth 6/13/2018

CADD File name: CL-171.dgn

13-JUN-2018 15:45
 01:TC0500PT01:TC01:OFFICE:CURR:*100056469 U-6015 B-G SigsysTask 11...CL=171.dgn
 AT LUS3330048 ENCA5396

SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.



MATCHLINE - SHEET CRP-6.173

MATCHLINE - SHEET CRP-6.171

- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

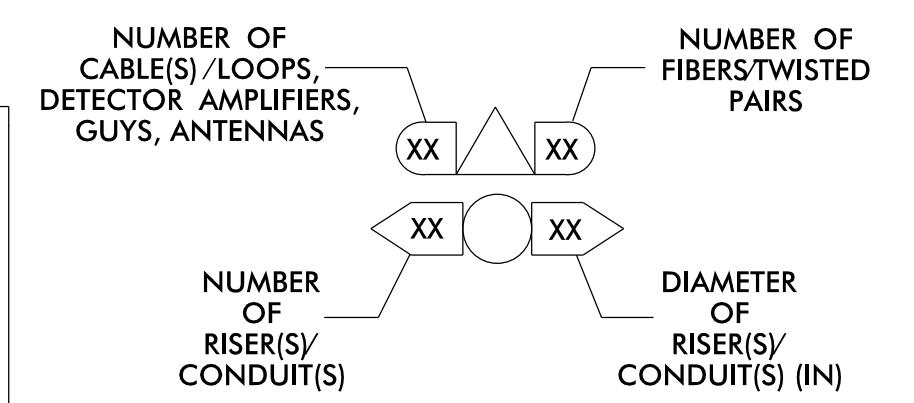
EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

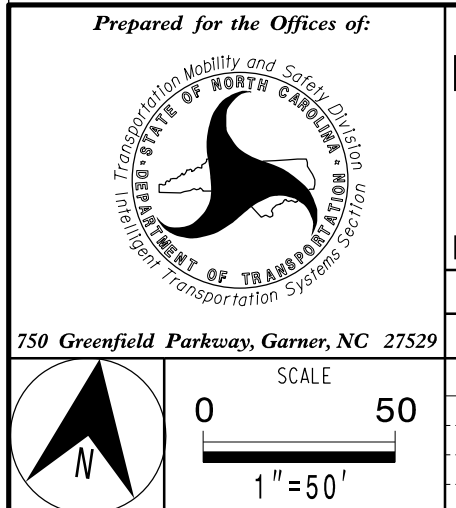
CONSTRUCTION NOTE SYMBOLOLOGY KEY



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
	21 INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE		42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)



Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AWE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER

SEAL 025892

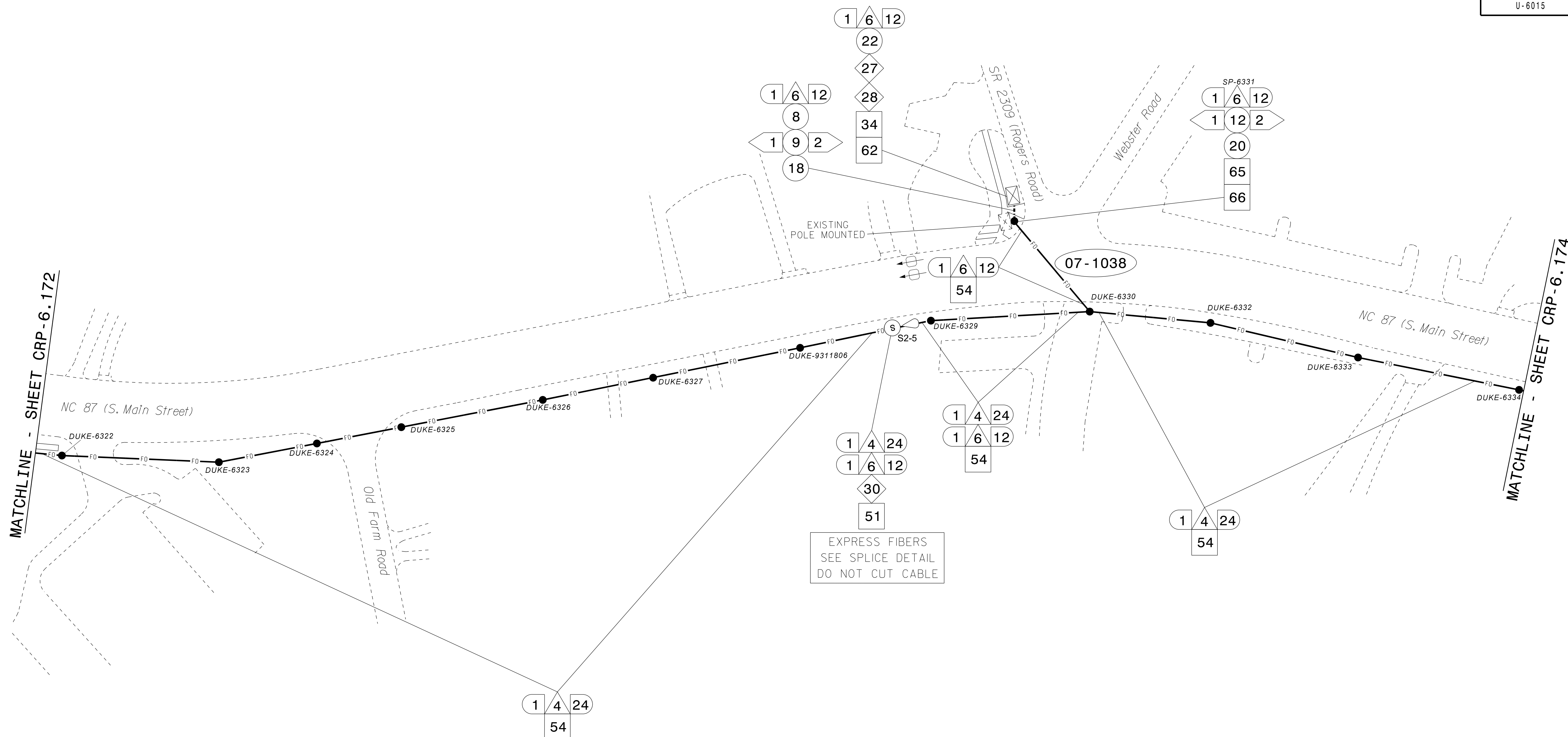
MELISSA B. TOTH

DocuSign by: Melissa B. Toth 11/13/2018

0980CG8E0404AF DATE

CADD File name: CL-172.dgn

13-JUN-2018 15:45
0-#TCONS00PT01loc*Trffic*cur*100056469 U-6015 B-G Sig Sys*Task 11...CL=172.dgn
ENC45386 AT LUS330048



NOTES:
1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

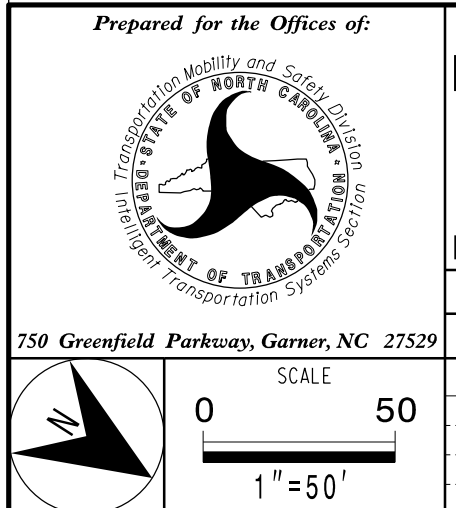
ATTACHMENT POINT:
XXX DISTANCE ABOVE (IN) REFERENCE POINT
YYY REFERENCE POINT
YYY REFERENCE POINT
XXX DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY
NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS
NUMBER OF FIBER TWISTED PAIRS
NUMBER OF RISER(S) / CONDUIT(S)
DIAMETER OF RISER(S) / CONDUIT(S) (IN)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

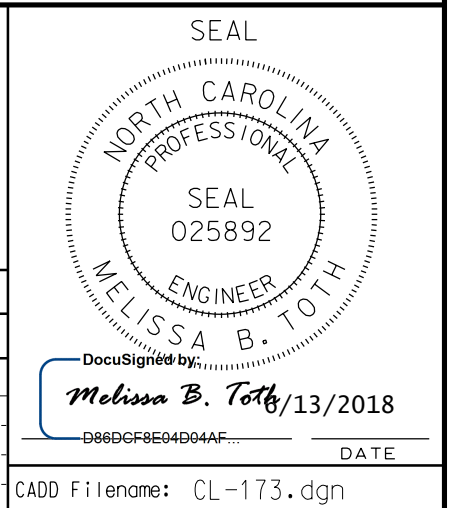
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

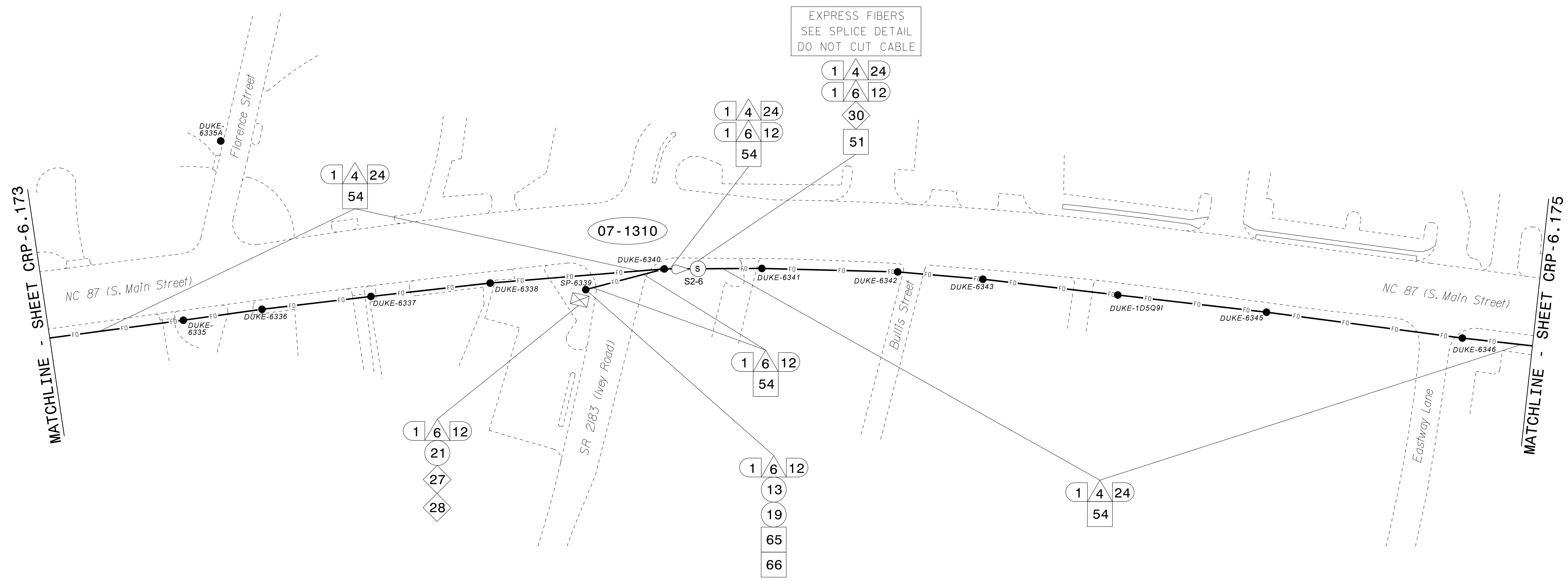


Burlington-Graham Signal System Cable Routing Plans

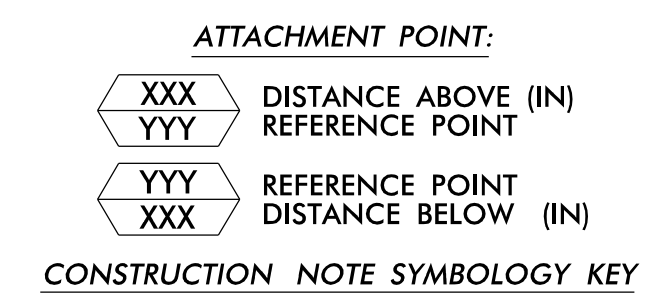
Division 7	Alamance County	Burlington & Graham
PLAN DATE: June 2018	REVIEWED BY: M B Toth	
PREPARED BY: ANE/AJH/VJP/NAP/JAW	REVIEWED BY: BJ Slocum	
REVISIONS	INIT.	DATE



13-JUN-2018 15:45
0:\work\proj\10056469 U-6015 B-G Sig Sys\Task 11_CL\CL-173.dgn
ENC45386 AT LUS333048



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 State of North Carolina
 Department of Transportation

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

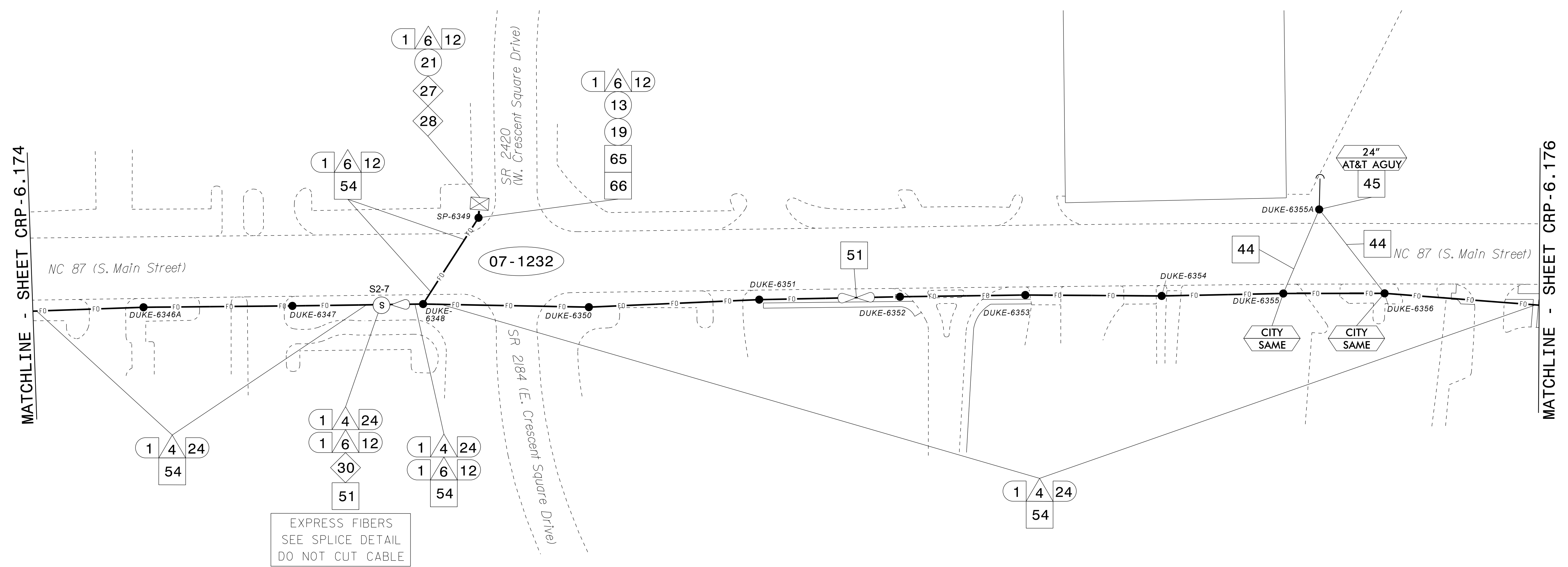
REVISIONS INIT. DATE

SCALE 0 50 1"=50'

DocuSign by: Melissa B. Toth 08/08/2018 13/2018

CADD File name: CL-174.dgn

13-JUN-2018 15:45
 01:TCRSP001:10056469 U-6015 B-G Sfg SysTask 11...CL-174.dgn
 AT LUS333048



EXPRESS FIBERS
SEE SPlice DETAIL
DO NOT CUT CABLE

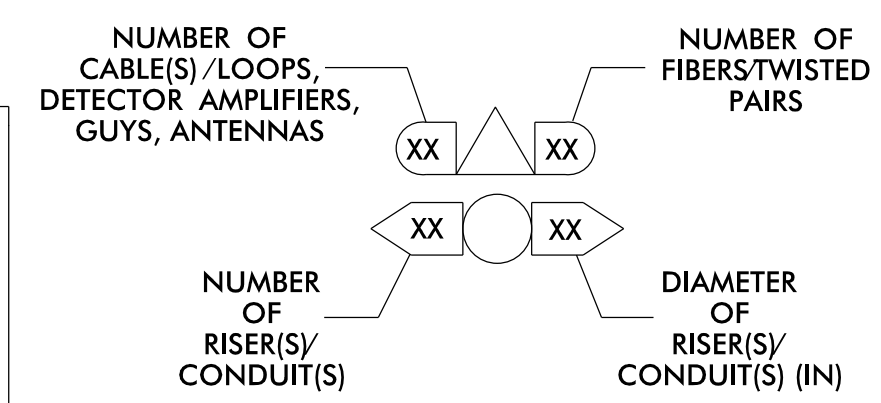
- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		

Prepared for the Offices of:

 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Division 7 Alameda County Burlington & Graham

Burlington-Graham Signal System Cable Routing Plans

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

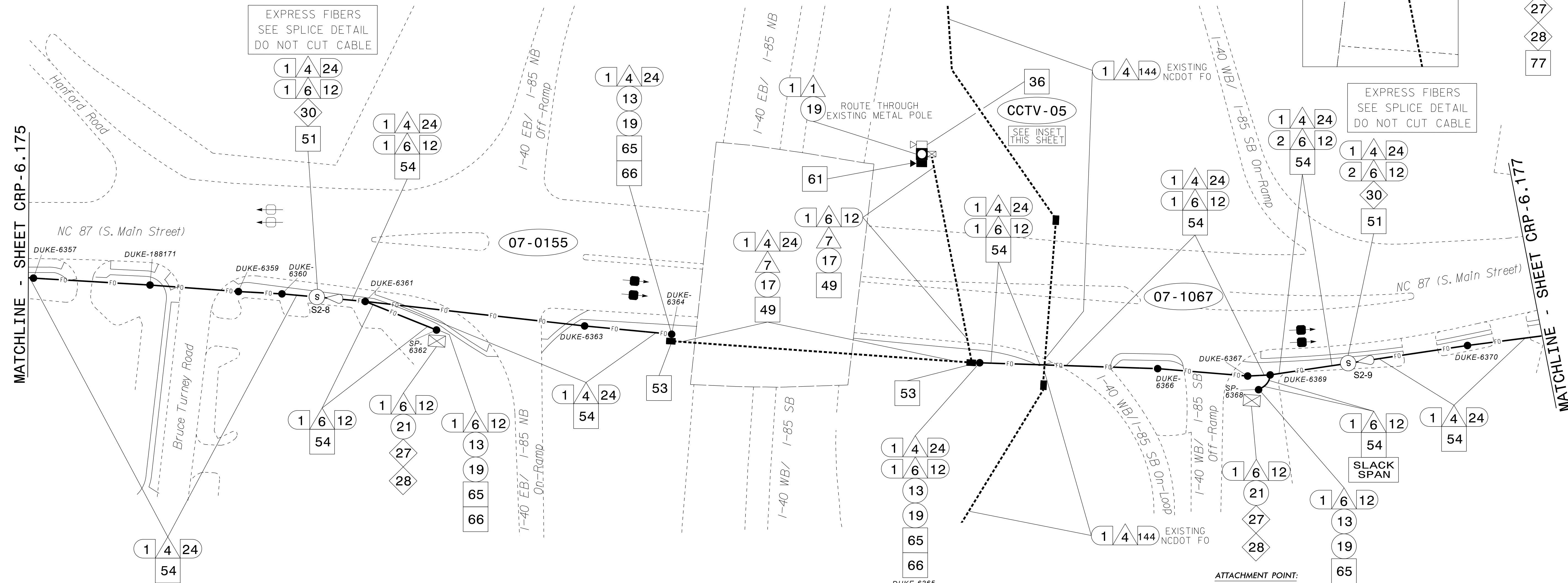
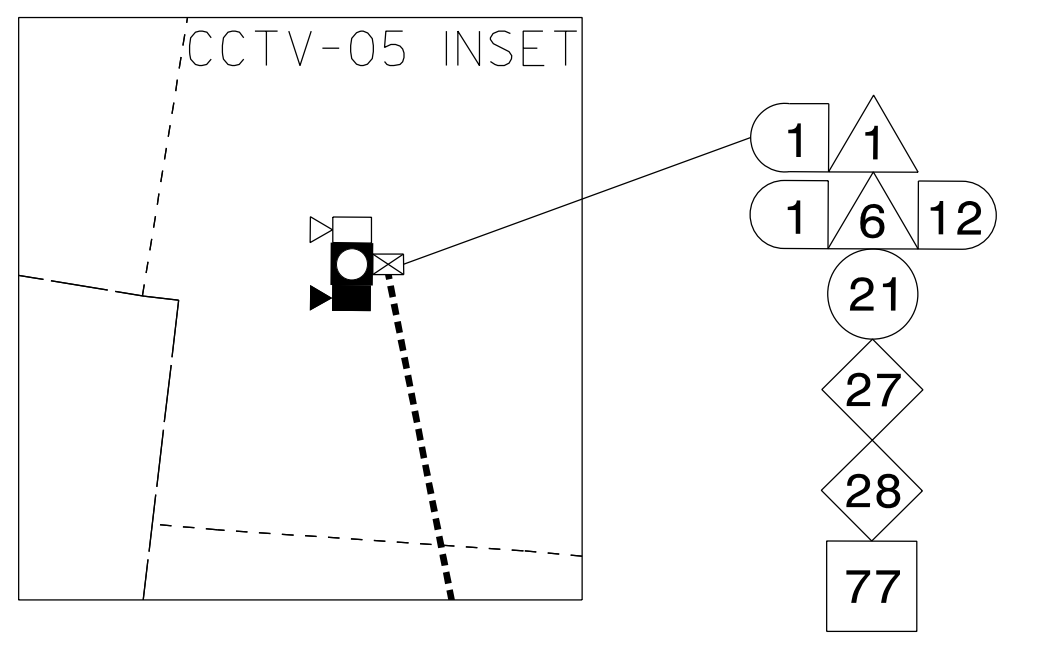
SCALE: 1"=50'

DocuSign by: Melissa B. Toth 08626804044F DATE: 6/13/2018

CADD File name: CL-175.dgn

13-JUN-2018 15:45
 01:TCrossport\tdt\carr\c\curr\100056469 U-6015 B-G Sig Sys\Task 11_C\CL-175.dgn
 ENCA5396 AT LUS333048

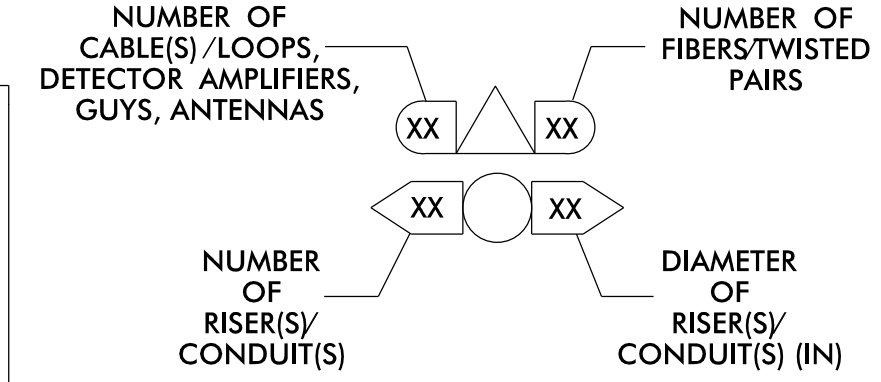
SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC, FOR ADDITIONAL INFORMATION.



- NOTES:
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:
 XXX DISTANCE ABOVE (IN) REFERENCE POINT
 YYY REFERENCE POINT
 YYY REFERENCE POINT
 XXX DISTANCE BELOW (IN)

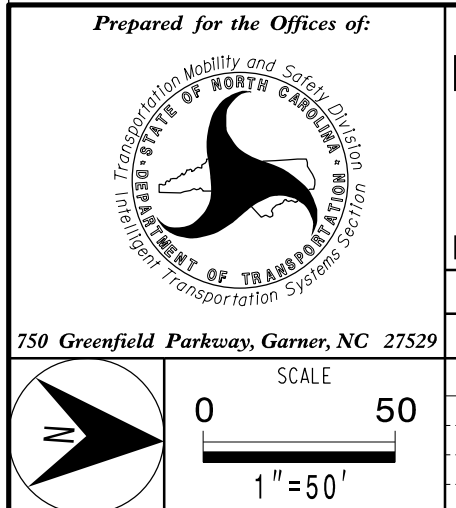
CONSTRUCTION NOTE SYMBOLOLOGY KEY



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)



Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

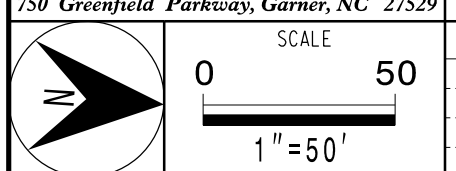
PREPARED BY: AWE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH

Melissa B. Toth 11/13/2018

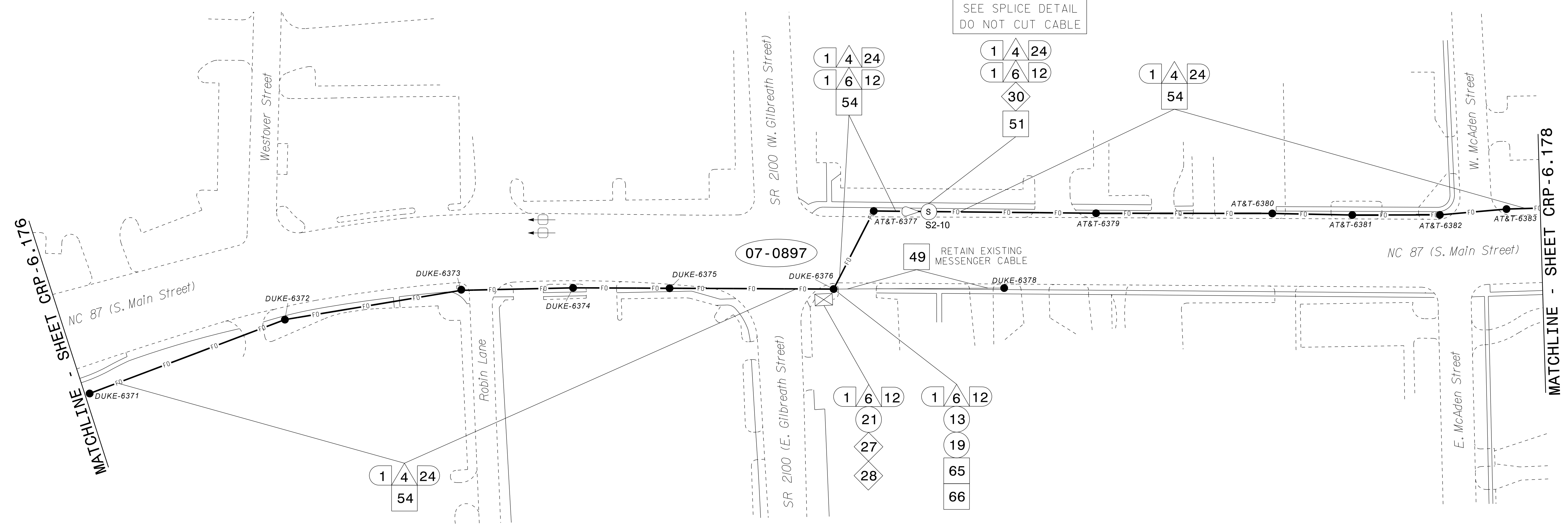
DATE



13-JUN-2018 15:45 0:41:00 D:\projects\10056469 U-6015 B-G Sig Sys\Task 11.CL\CL-176.dgn

SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE



MATCHLINE - SHEET CRP-6.176

MATCHLINE - SHEET CRP-6.178

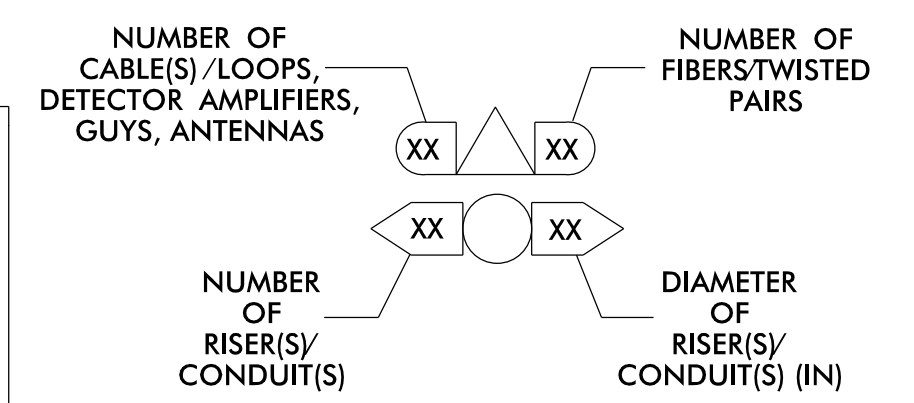
- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 Department of Transportation and Safety, State of North Carolina

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth
 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529 SCALE 1"=50'

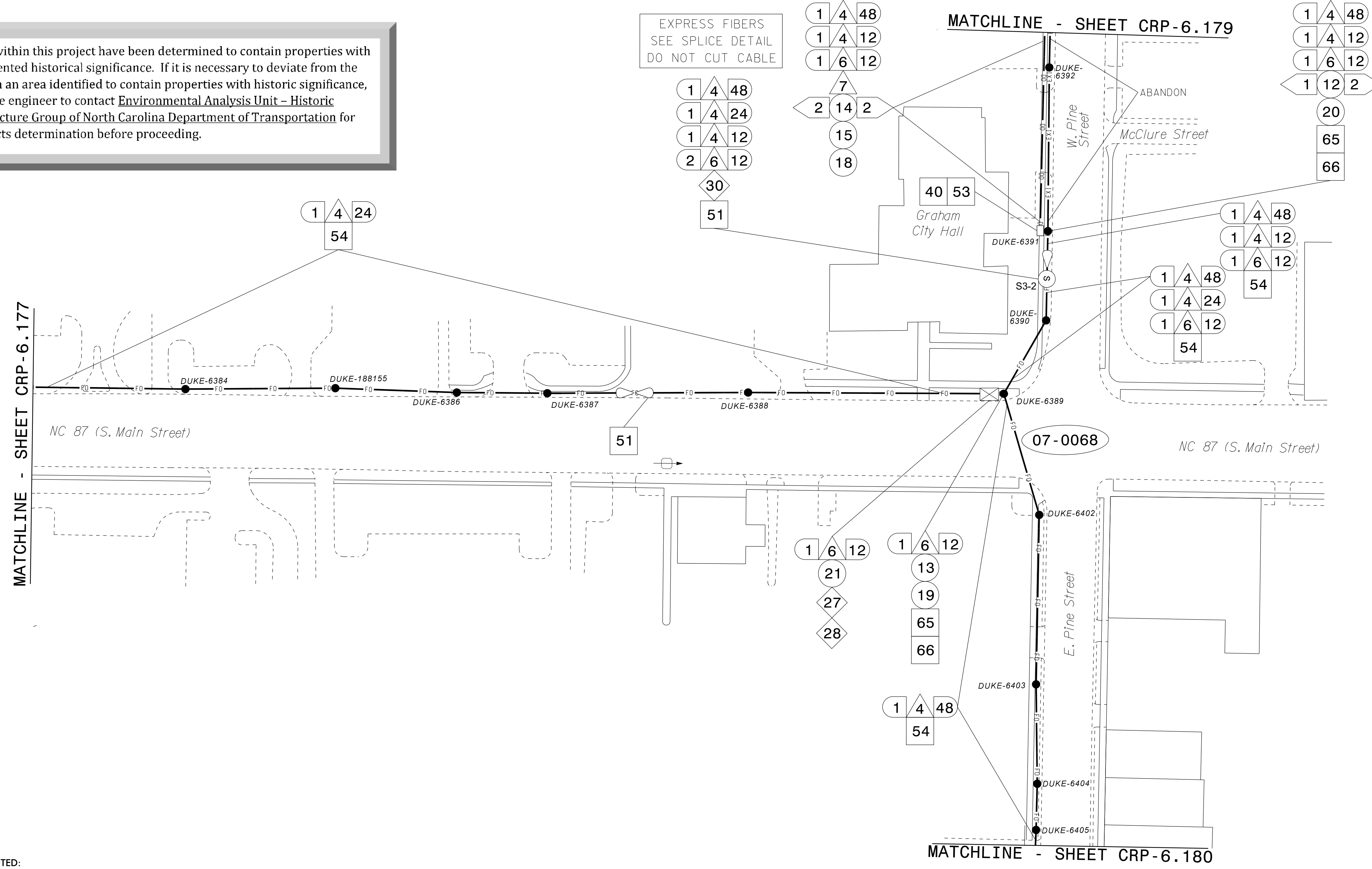
Melissa B. Toth 13/2018

CADD File name: CL-177.dgn

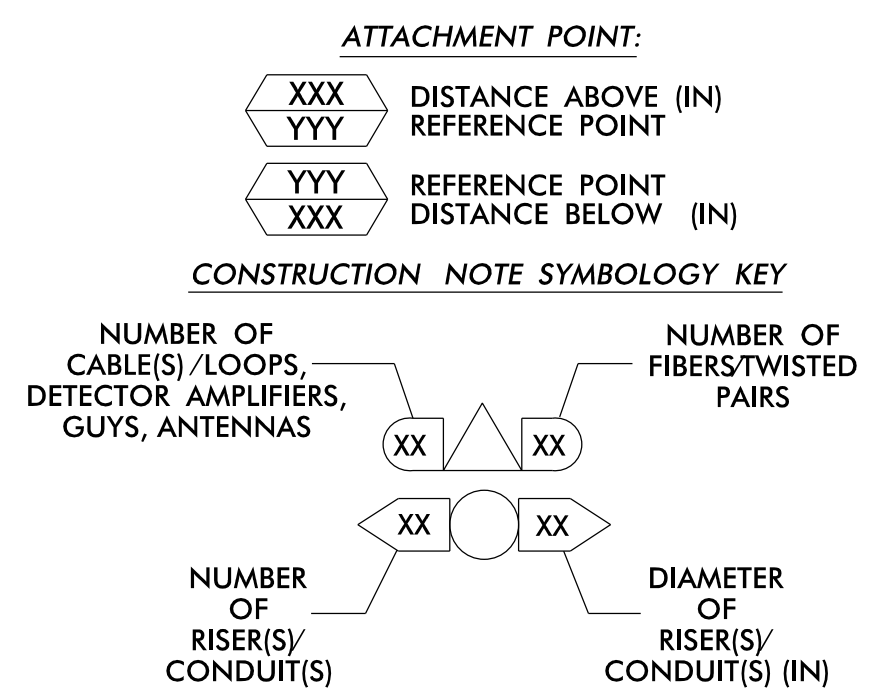
13-JUN-2018 15:45
0:\work\proj\cl\177\crp\6\crp6.177.dgn
ENC45386 AT LUS330048

Areas within this project have been determined to contain properties with documented historical significance. If it is necessary to deviate from the plans in an area identified to contain properties with historic significance, alert the engineer to contact Environmental Analysis Unit – Historic Architecture Group of North Carolina Department of Transportation for an effects determination before proceeding.

EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKFILL AND COIL CITY IT CABLE
		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64	INTERCEPT AND REROUTE EXISTING CONDUITS	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65	BOND MESSENGER TO POLE GROUND	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 878-6888 NCBEES #F-0326

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

REVISIONS INIT. DATE

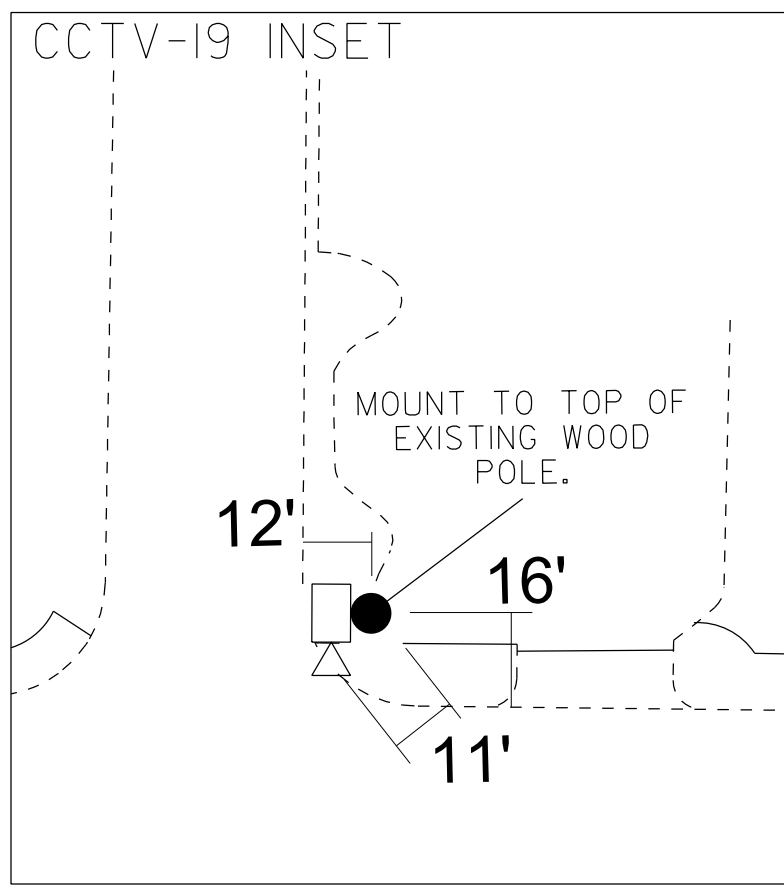
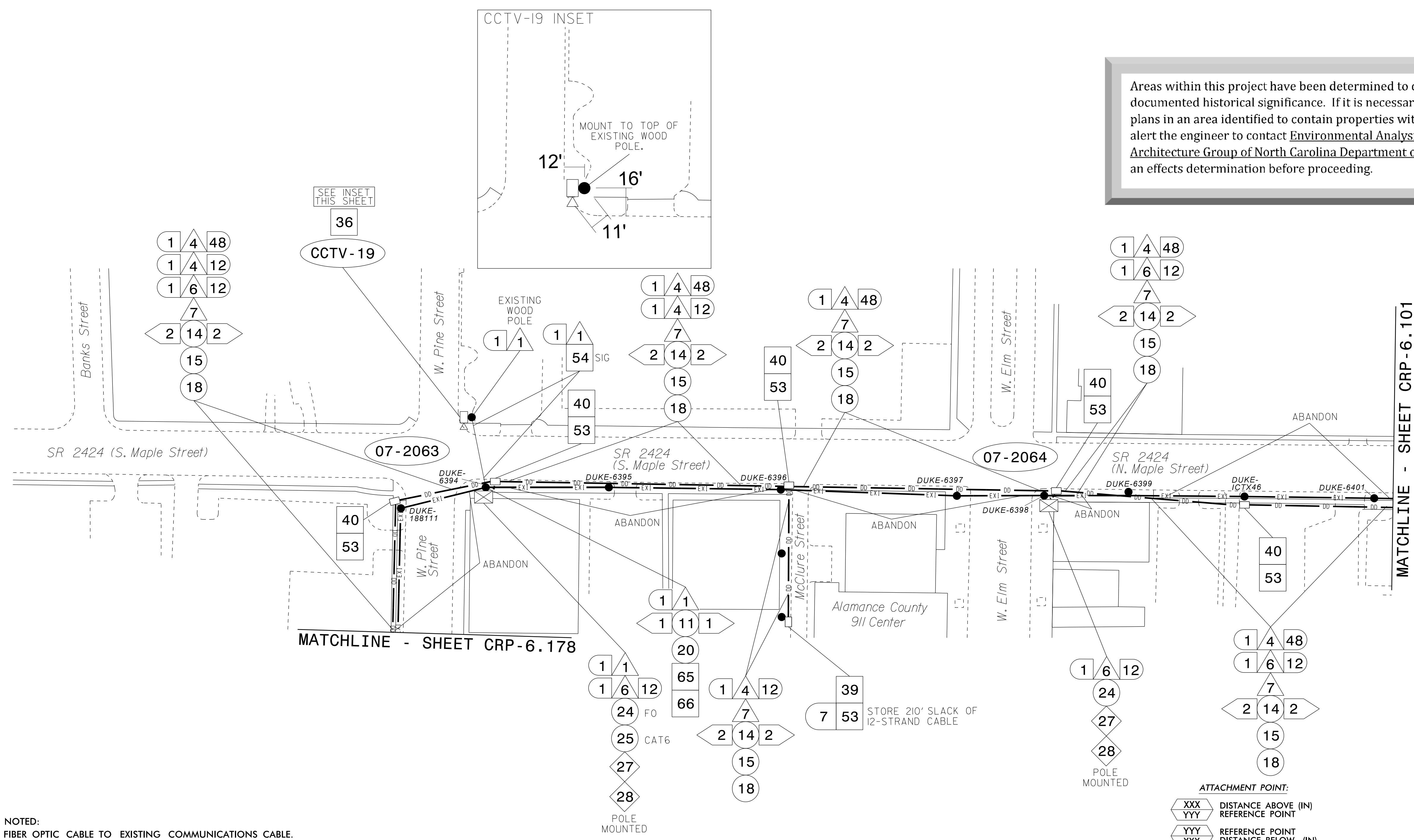
SEAL NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH 025892

Melissa B. Toth 1/13/2018

CADD File name: CL-178.dgn

13-JUN-2018 15:45
0:\work\proj\100056469 U-6015 B-G Sig Sys\Task 11.CL\CL-178.dgn
ENC45386 AT LUS333048

Areas within this project have been determined to contain properties with documented historical significance. If it is necessary to deviate from the plans in an area identified to contain properties with historic significance, alert the engineer to contact Environmental Analysis Unit - Historic Architecture Group of North Carolina Department of Transportation for an effects determination before proceeding.



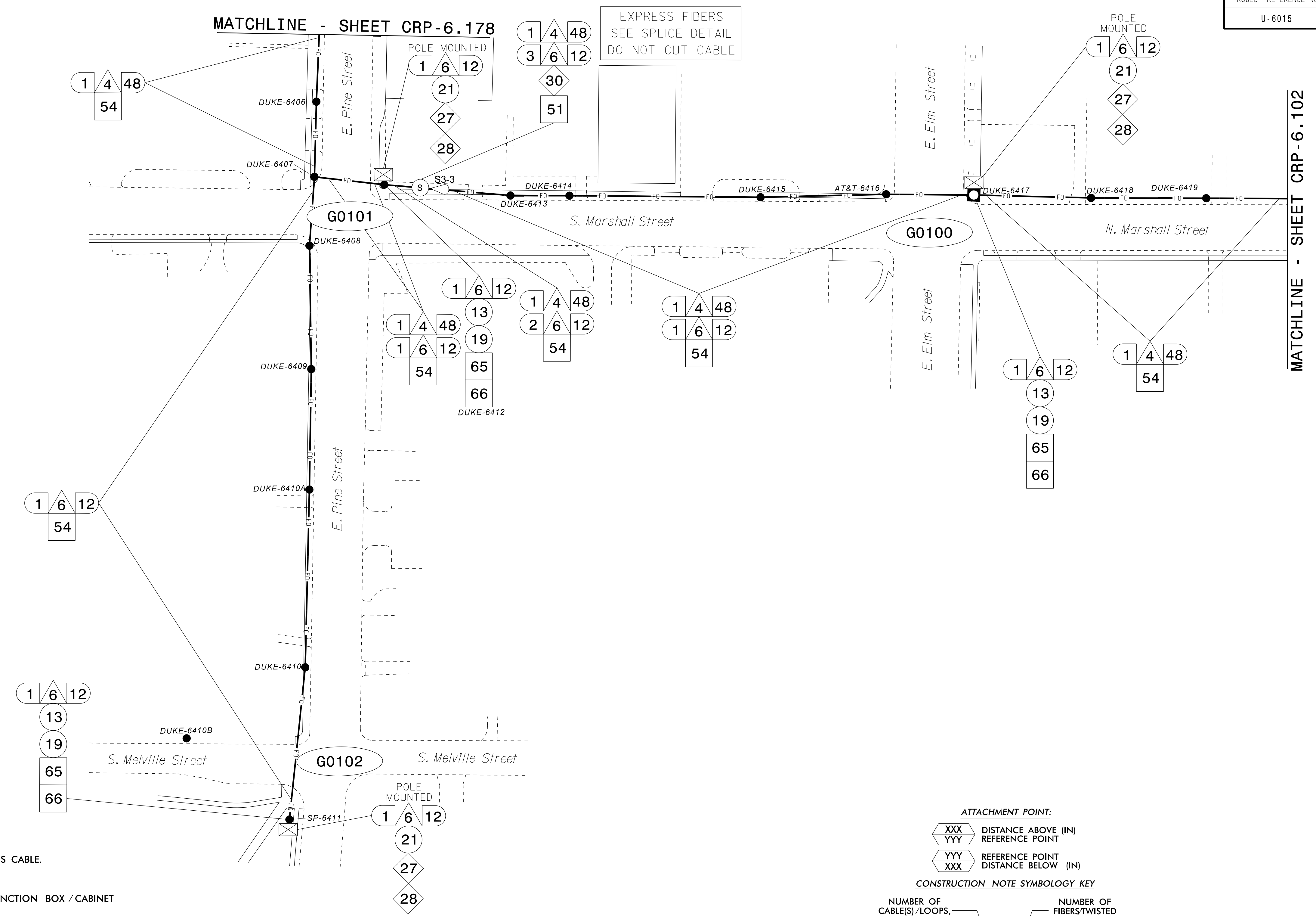
- NOTES:
1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

Table with 10 columns and 10 rows of construction notes, each with a numbered callout symbol and a corresponding description of the work to be performed.

ATTACHMENT POINT:
CONSTRUCTION NOTE SYMBOLOLOGY KEY
Includes symbols for distance above/below reference points, cable loops, riser counts, and diameters.

ATKINS logo and project information:
Burlington-Graham Signal System Cable Routing Plans
Division 7 Alamance County Burlington & Graham
Includes revision table, scale (1"=50'), and signature block for Melissa B. Toth.

13-JUN-2018 15:45E
0:**T:\crosport\p1\loc\tr\c\cur*10056469 U-6015 B-G Sig Sys\Task 11...CL\CL-179.dgn
ENC45396 AT LUS33048



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY

NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS

NUMBER OF FIBER/TWISTED PAIRS

NUMBER OF RISER(S) / CONDUIT(S)

DIAMETER OF RISER(S) / CONDUIT(S) (IN)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 180 RALEIGH, NORTH CAROLINA 27609 (919) 878-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

Prepared for the Offices of:

ATKINS

750 Greenfield Parkway, Garner, NC 27529

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

SCALE 0 50 1"=50'

REVISIONS

INIT. DATE

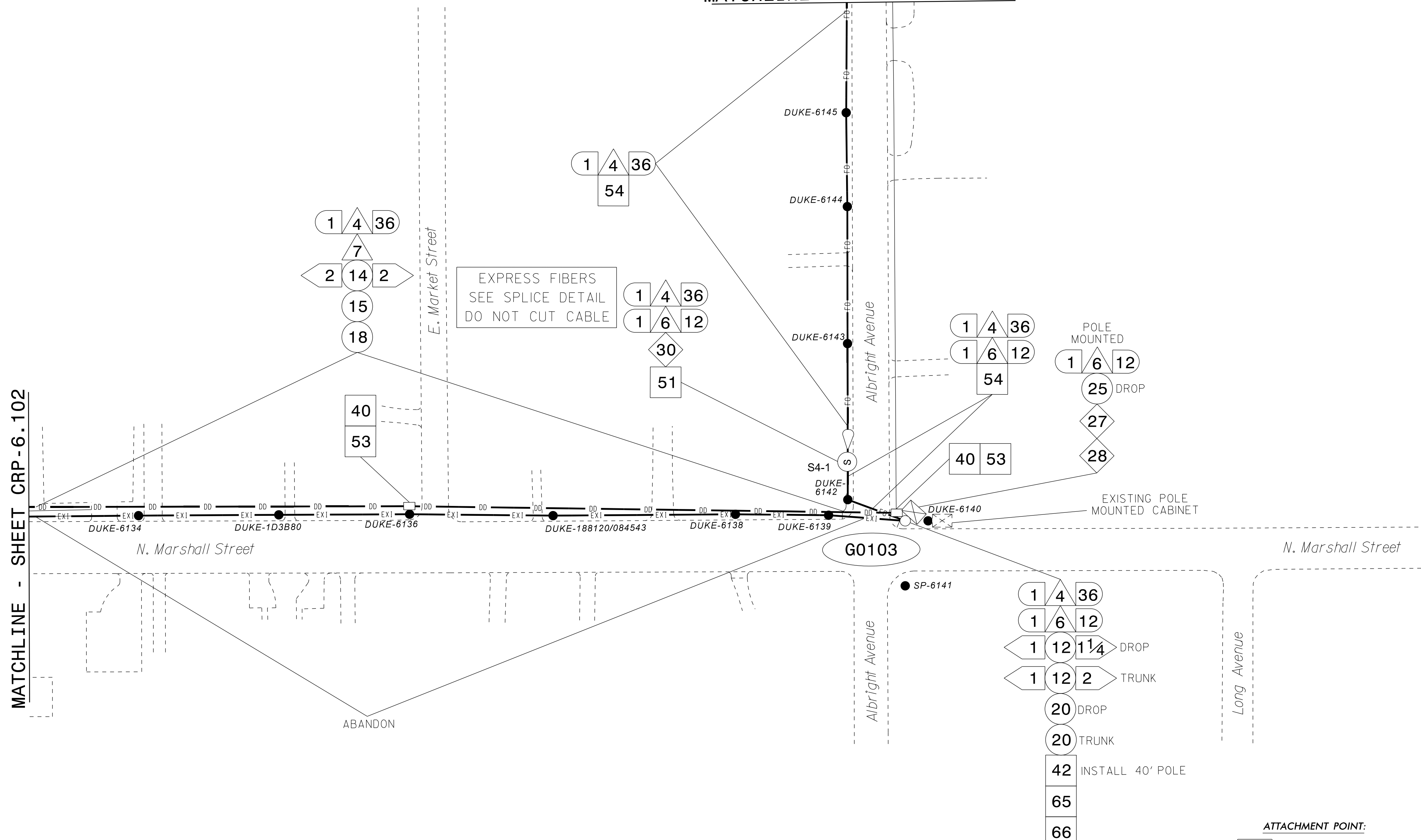
DocuSign by: **Melissa B. Toth** 13/2018

CADD File name: CL-180.dgn

13-JUN-2018 15:45
D:\crosport\p1\crosport\crosport\crp\crp\11_01_180.dgn

MATCHLINE - SHEET CRP-6.182

MATCHLINE - SHEET CRP-6.102



NOTES:

- 1. UNLESS OTHERWISE NOTED:
- OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
- ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
- ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

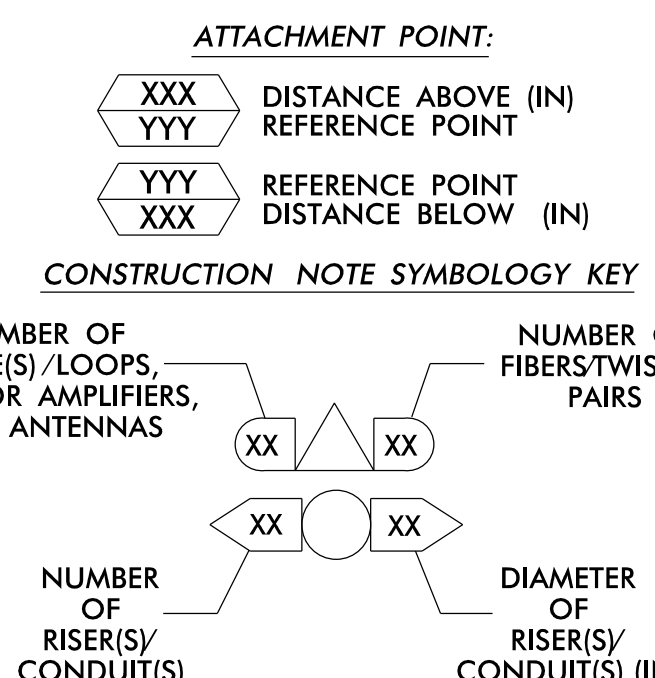
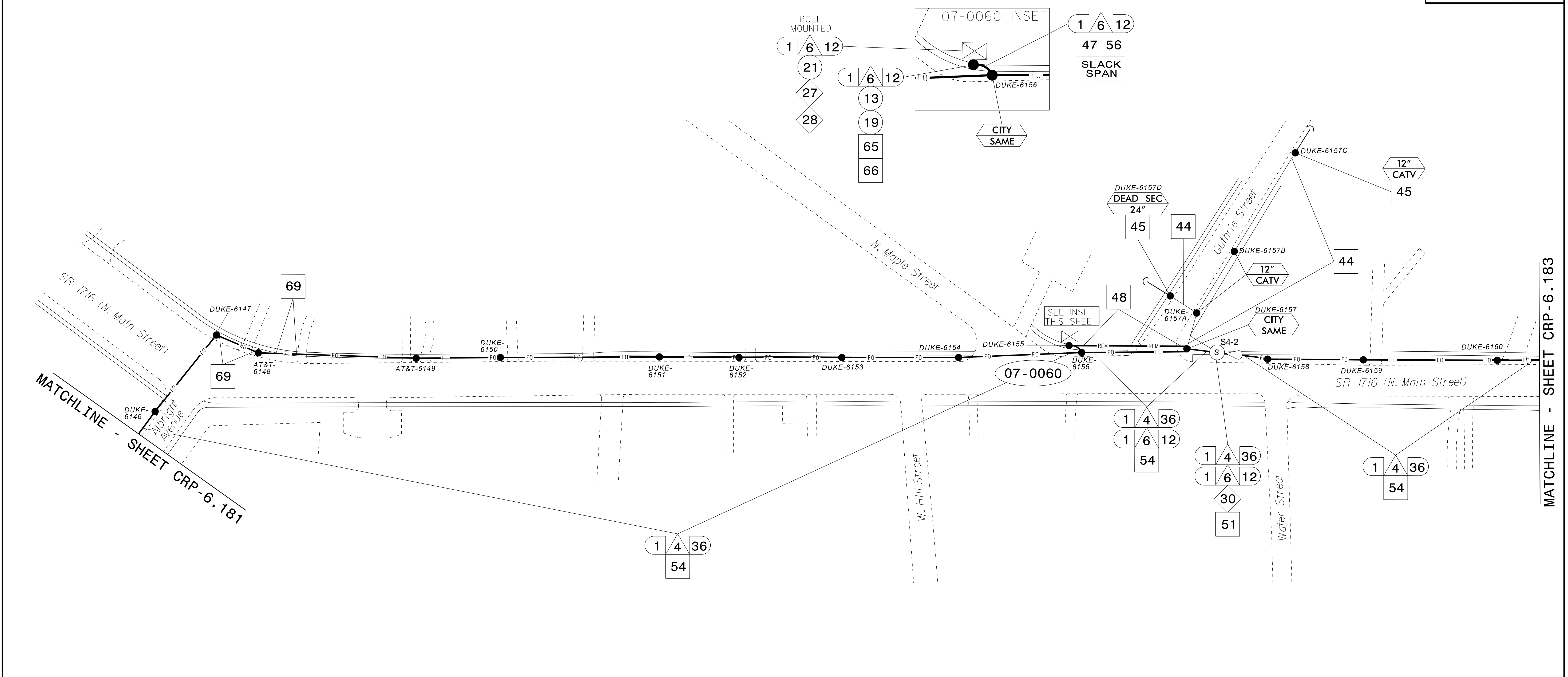


Table with 10 columns and 10 rows of construction notes, each with a numbered callout symbol and a description of the work to be performed.

Project information block including the Atkins logo, project name 'Burlington-Graham Signal System Cable Routing Plans', division and county information, plan date, and a professional seal for Melissa B. Toth.

13-JUN-2018 15:45
D:\projects\p01\cadd\crp\6015 B-G Sig Sys\Task 11...
ENC45386 AT LUS333048



NOTES:

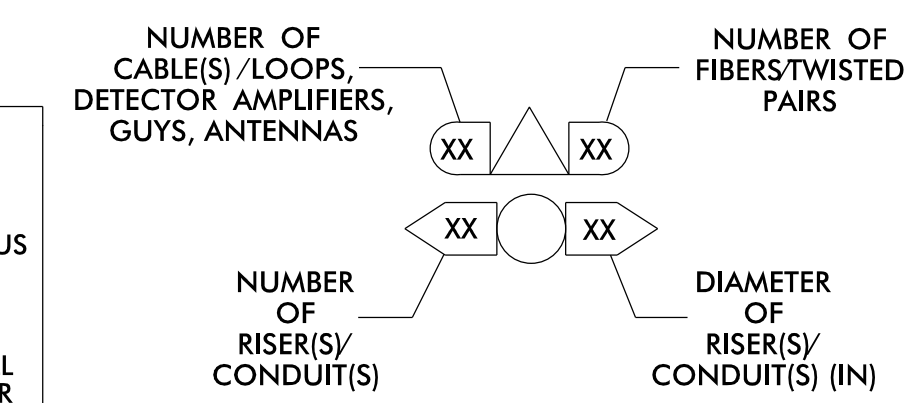
1. UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

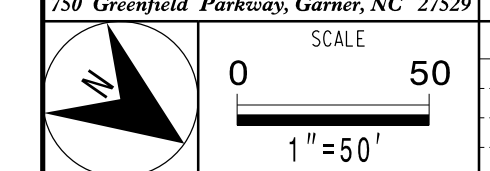
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 Department of Transportation and Safety
 750 Greenfield Parkway, Garner, NC 27529

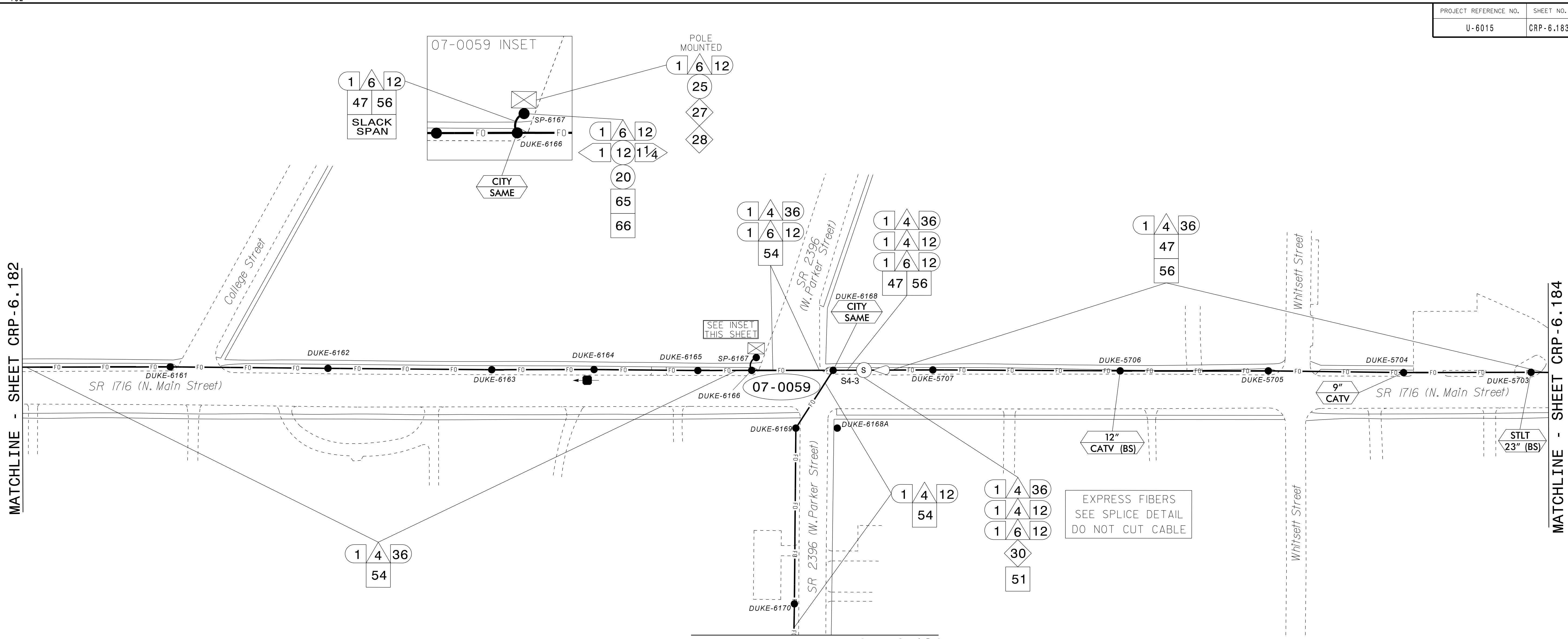
Burlington-Graham Signal System Cable Routing Plans Division 7 Alamance County Burlington & Graham		PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVISIONS: _____ INIT. DATE: _____	
		REVIEWED BY: M B Toth REVIEWED BY: BJ Slocum	

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 MELISSA B. TOTH
 025892
 DocuSigned by:
 Melissa B. Toth 13/2018
 0980CF8E94044F
 DATE: _____
 CADD File name: CL-182.dgn



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

13-JUN-2018 15:45
 01-TCR0500PT101loc*100056469 U-6015 B-G Sig Sys*task 11...CL-182.dgn
 AT LUS330048



MATCHLINE - SHEET CRP-6.182 (Left)

MATCHLINE - SHEET CRP-6.184 (Right)

MATCHLINE - SHEET CRP-6.194 (Bottom)

SEE SIGNAL PLAN FOR SYSTEM DETECTOR INSTALLATION/ASSIGNMENT DETAILS. REFER TO "SYSTEM DETECTORS AND CONTROL ZONES" SCHEMATIC. FOR ADDITIONAL INFORMATION.

- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY

NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS: XX △ XX

NUMBER OF RISER(S) / CONDUIT(S): XX ○ XX

NUMBER OF FIBERS/TWISTED PAIRS: XX △ XX

DIAMETER OF RISER(S) / CONDUIT(S) (IN): XX ○ XX

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		

Prepared for the Offices of:

 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

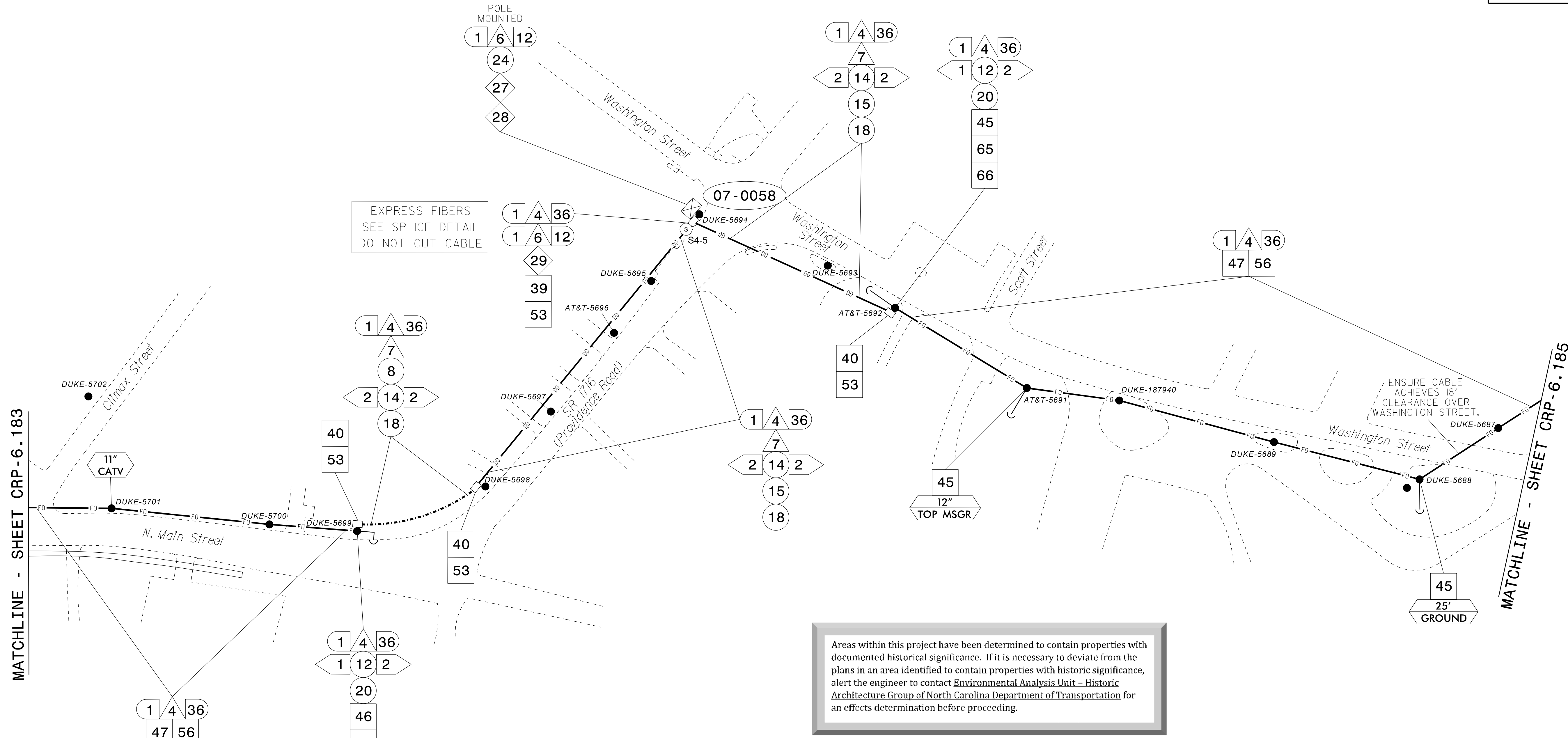
REVISIONS INIT. DATE

SCALE 0 50 1"=50'

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 MELISSA B. TOOTH
 025892
 08602804044F
 13/2018
 DATE

CADD File name: CL-183.dgn

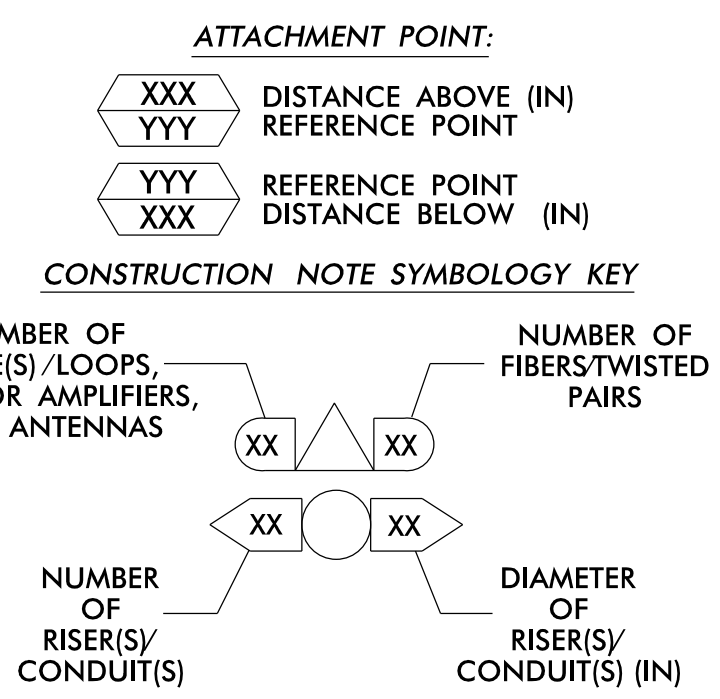
13-JUN-2018 15:45
 01:TCrossport\tdt\carr\c\curr*100056469 U-6015 B-G Sig Sys\Task 11_CL\CL-183.dgn
 ENCA5386 AT LUS333048



EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE


Areas within this project have been determined to contain properties with documented historical significance. If it is necessary to deviate from the plans in an area identified to contain properties with historic significance, alert the engineer to contact Environmental Analysis Unit - Historic Architecture Group of North Carolina Department of Transportation for an effects determination before proceeding.

- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 878-6888 NCBEES #F-0326

Prepared for the Offices of:

 750 Greenfield Parkway, Garner, NC 27529

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

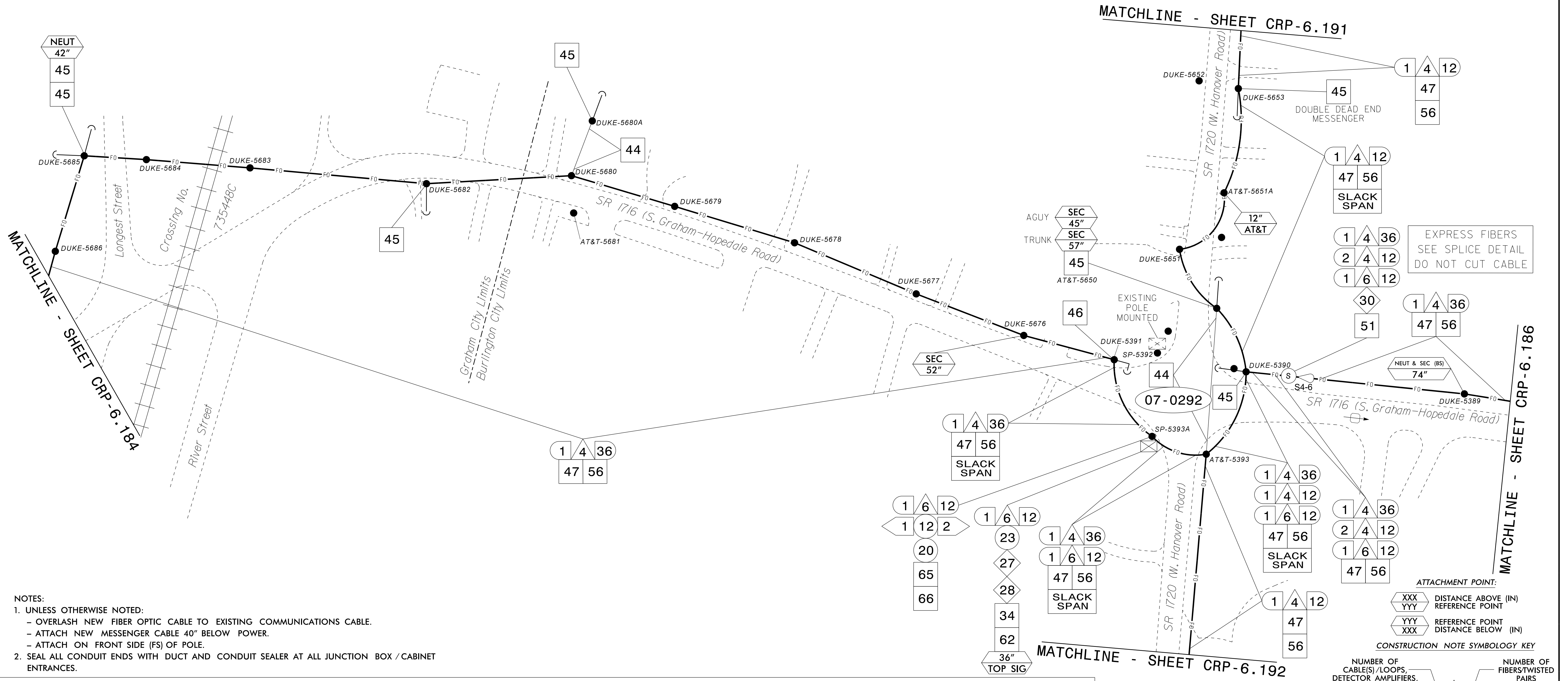
PLAN DATE: June 2018
 PREPARED BY: AME/AJH/VJP/NAP/JAW
 REVIEWED BY: M B Toth
 REVISIONS: _____ INIT. DATE

SCALE: 1"=50'

DocuSign by: Melissa B. Toth
 088068E9404AF
 DATE: 6/13/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

13-JUN-2018 15:45
 01:TCRSP0011001:officetask 11...CL-184.dgn
 ENC45396 AT LUS333048



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB/ CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATTACHMENT POINT:

XXX YYY DISTANCE ABOVE (IN) REFERENCE POINT

YYY XXX REFERENCE POINT DISTANCE BELOW (IN)


CONSTRUCTION NOTE SYMBOLY KEY

NUMBER OF CABLE(S)/LOOPS, DETECTOR AMPLIFIERS, GUYS, ANTENNAS

NUMBER OF FIBERS/TWISTED PAIRS

NUMBER OF RISER(S)/ CONDUIT(S)

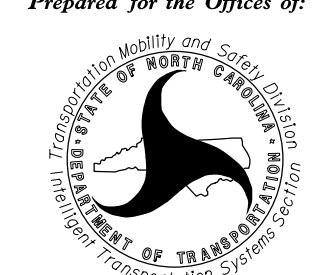
DIAMETER OF RISER(S)/ CONDUIT(S) (IN)



1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES ARE PRESENT

Prepared for the Offices of:



750 Greenfield Parkway, Garner, NC 27529

Burlington-Graham Signal System Cable Routing Plans

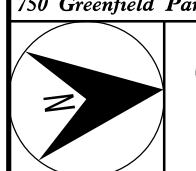
Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AWE/AJH/VJP/NAP/JAW REVISIONS

SCALE

0 50 1"=50'

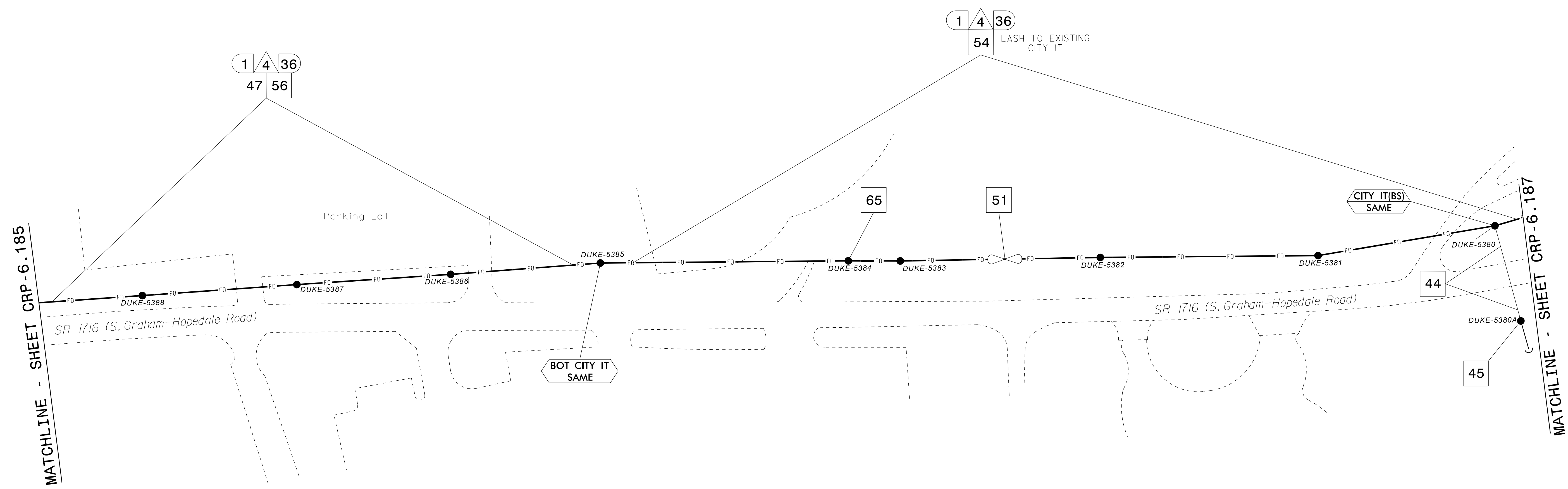


DocuSign by: Melissa B. Toth 13/2018

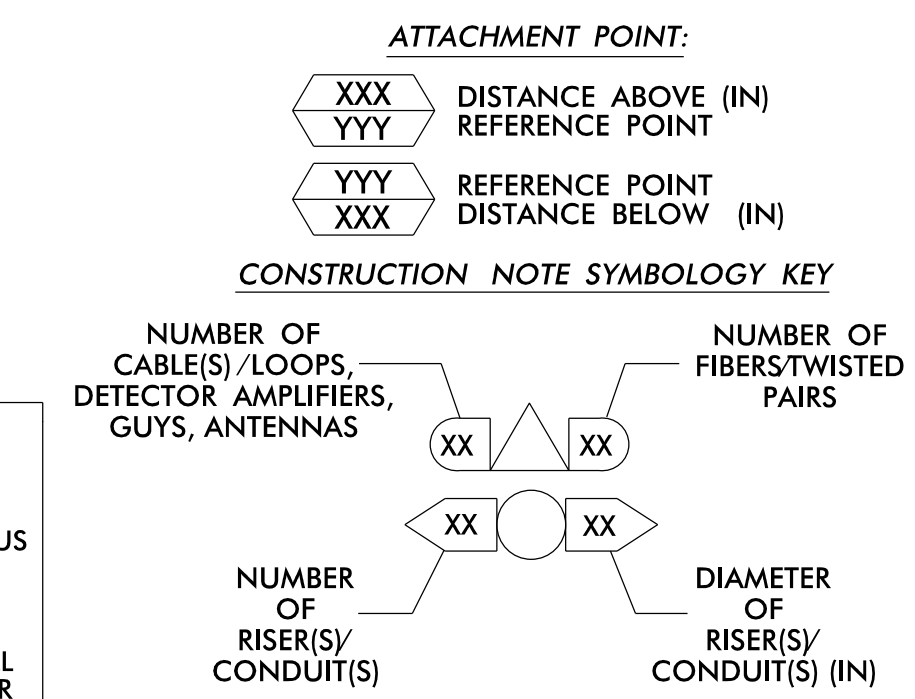
098DCFB824064AF DATE

CADD File Name: CL-185.dgn

13-JUN-2018 15:45
D:\work\proj\101\loc\loc\t\c\cur\10056469 U-6015 B-G Sfg Sys\Task 11_LCL\CL-185.dgn AT LUS333048



NOTES:
 1. UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Division 7 Alamance County Burlington & Graham

Burlington-Graham Signal System Cable Routing Plans

PLAN DATE: June 2018 REVIEWED BY: M B Toth
 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

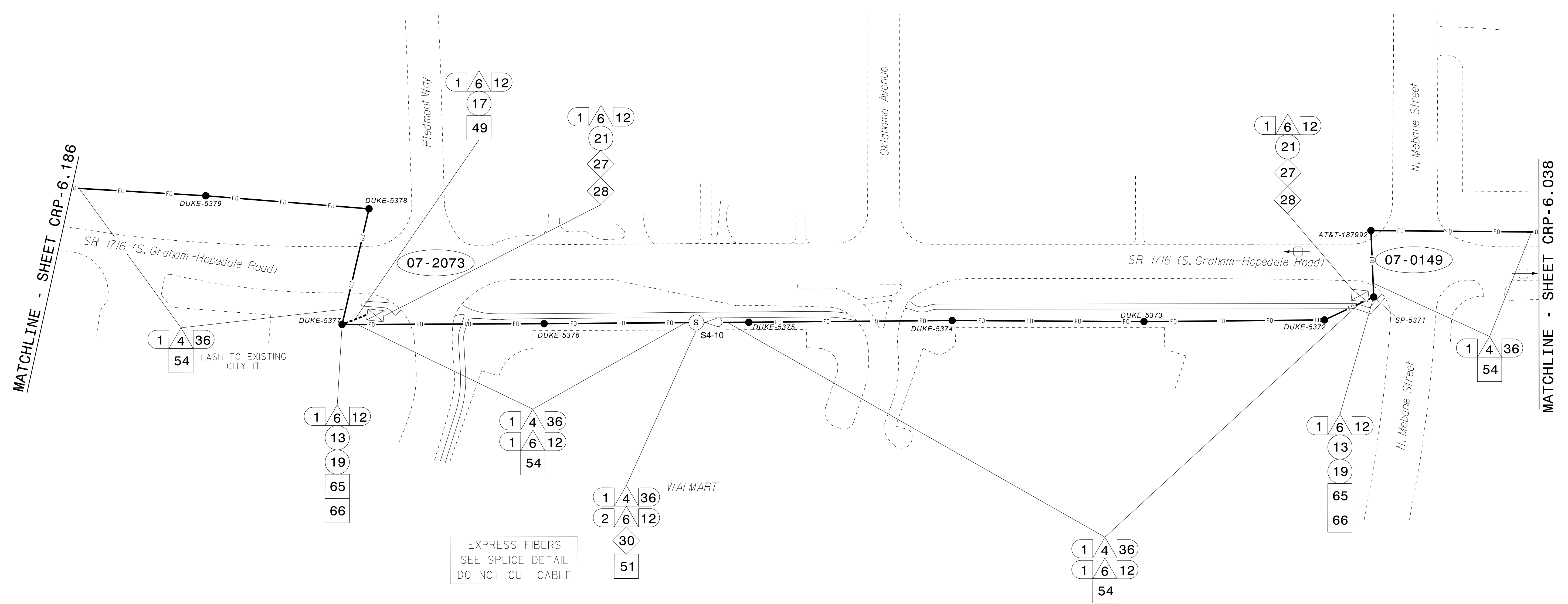
750 Greenfield Parkway, Garner, NC 27529
 SCALE: 0 50 1"=50'

DocuSign by: *Melissa B. Toth* 11/13/2018
 0980CF8E94044F DATE

CADD File name: CL-186.dgn

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

13-JUN-2018 15:45
 01:TC:csop:rdt:loc:tr:off:ic:cur:100056469 U-6015 B-G S:ig Sys:task 11_CL:CL-186.dgn
 ENCA5396 AT LUS330048



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY

NUMBER OF CABLE(S) / LOOPS, DETECTOR / AMPLIFIERS, GUYS, ANTENNAS

NUMBER OF FIBERS/TWISTED PAIRS

NUMBER OF RISER(S) / CONDUIT(S)

DIAMETER OF RISER(S) / CONDUIT(S) (IN)

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
		21	INSTALL CABLE(S) IN EXISTING CABINET ENTRANCE			42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64	INTERCEPT AND REROUTE EXISTING CONDUITS	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65	BOND MESSENGER TO POLE GROUND	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 State of North Carolina
 Department of Transportation

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE 0 50 1"=50'

DocuSign by: Melissa B. Toth 0860CF8E0404AF 13/2018

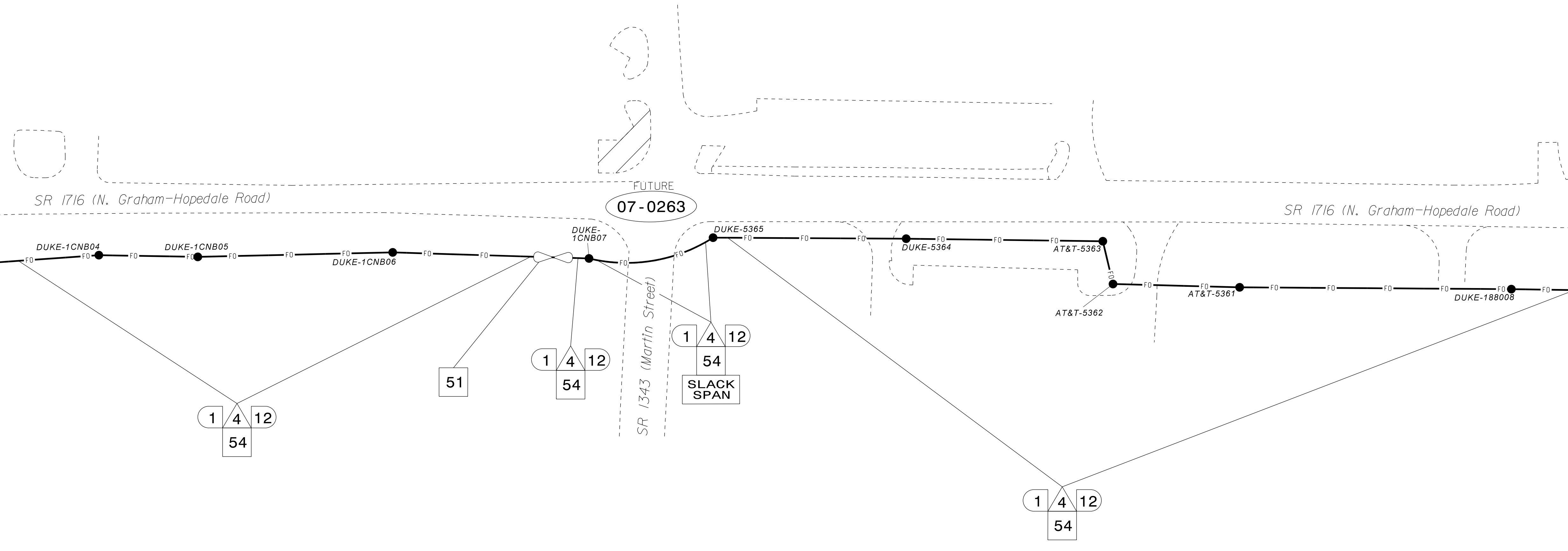
CADD File name: CL-187.dgn

13-JUN-2018 15:45
 01:45:00 PLOT TO: C:\Users\jgoff\OneDrive\Documents\11_C:\wcl-187.dgn
 AT LUS3330048

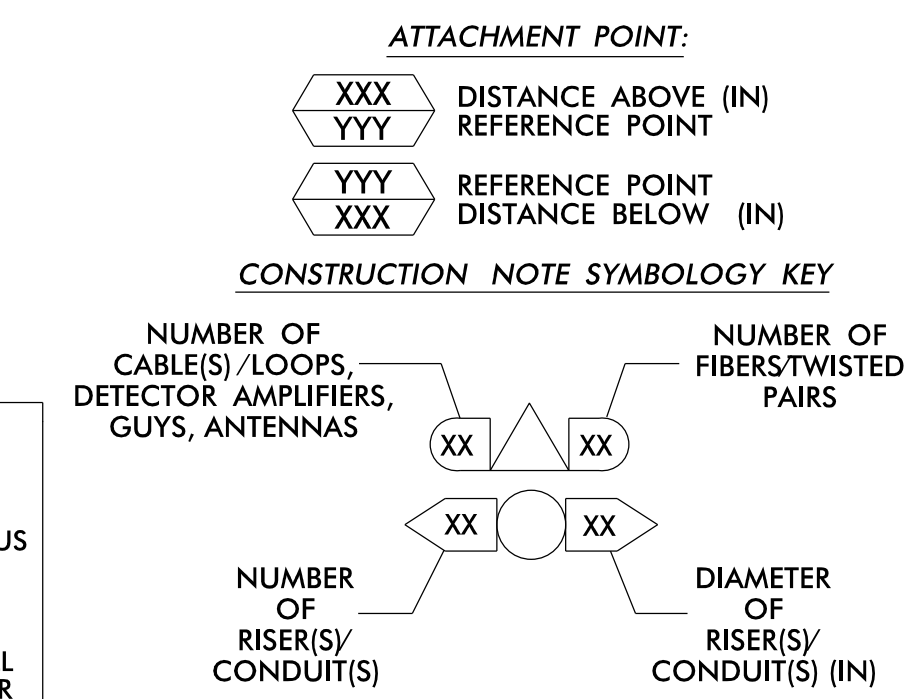
Areas within this project have been determined to contain properties with documented historical significance. If it is necessary to deviate from the plans in an area identified to contain properties with historic significance, alert the engineer to contact Environmental Analysis Unit - Historic Architecture Group of North Carolina Department of Transportation for an effects determination before proceeding.

MATCHLINE - SHEET CRP-6.038

MATCHLINE - SHEET CRP-6.189



- NOTES:
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBES #F-0326

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

REVISIONS INIT. DATE

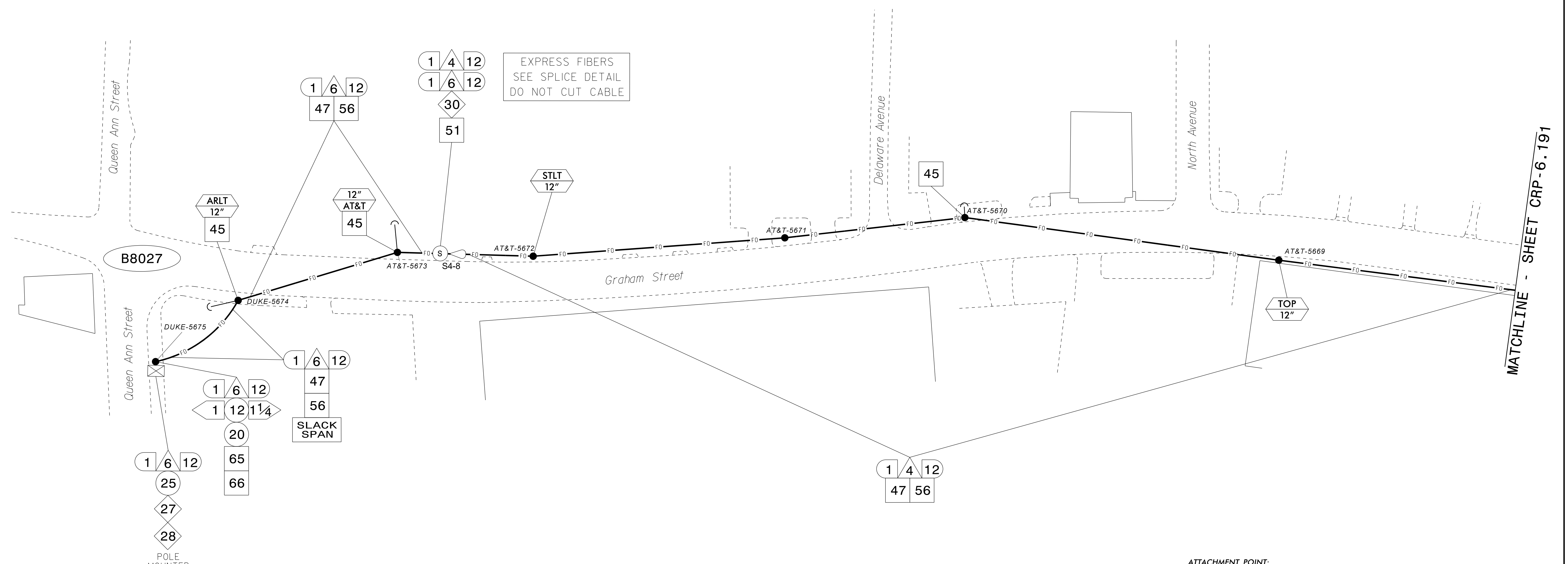
DocuSign by: **Melissa B. Toth** 025892 ENGINEER

DATE 11/13/2018

CADD File name: CL-188.dgn

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

13-JUN-2018 15:45 0:\work\proj\atkins\cadd\crp-6.188.dgn



EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE

MATCHLINE - SHEET CRP-6.191

NOTES:

- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

- ATTACHMENT POINT:**
- XXX DISTANCE ABOVE (IN)
 - YYY REFERENCE POINT
 - YYY REFERENCE POINT
 - XXX DISTANCE BELOW (IN)

- CONSTRUCTION NOTE SYMBOLOLOGY KEY**
- NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS
 - NUMBER OF FIBER TWISTED PAIRS
 - DIAMETER OF RISER(S) / CONDUIT(S) (IN)

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS
1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

**Burlington-Graham Signal System
Cable Routing Plans**

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

SCALE
0 50
1"=50'

750 Greenfield Parkway, Garner, NC 27529

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
MELISSA B. TOTH
025892
13/2018

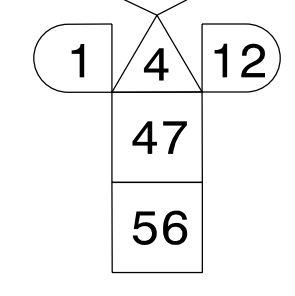
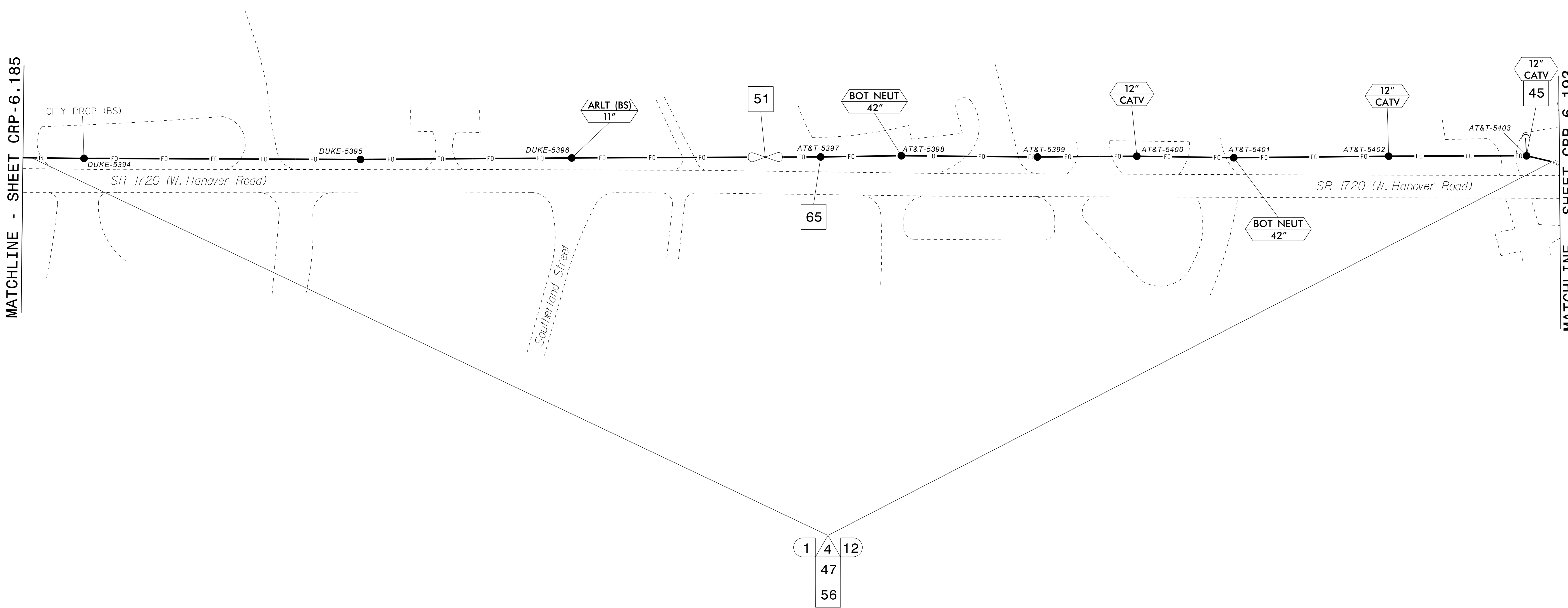
DATE
11/13/2018

CADD Filename: CL-190.dgn

13-JUN-2018 15:45
D:\TC\projects\Burlington-Graham\Signal System\Task 11.CL-190.dgn
ENC45396 AT LUS330048

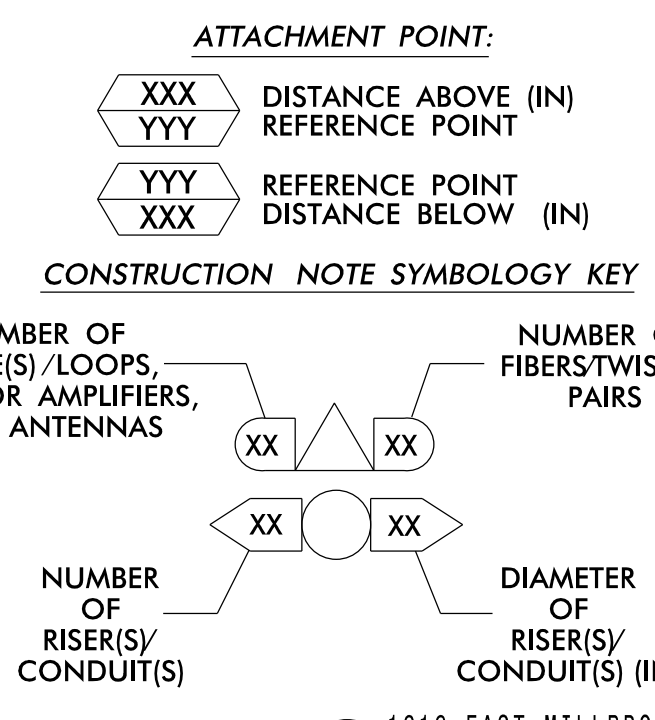
MATCHLINE - SHEET CRP-6.185

MATCHLINE - SHEET CRP-6.193



13-JUN-2018 15:45
0:\projects\p01\crp\6\192\11_01.dgn
ENC45396

- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
TRANSPORTATION SYSTEMS DIVISION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth
PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

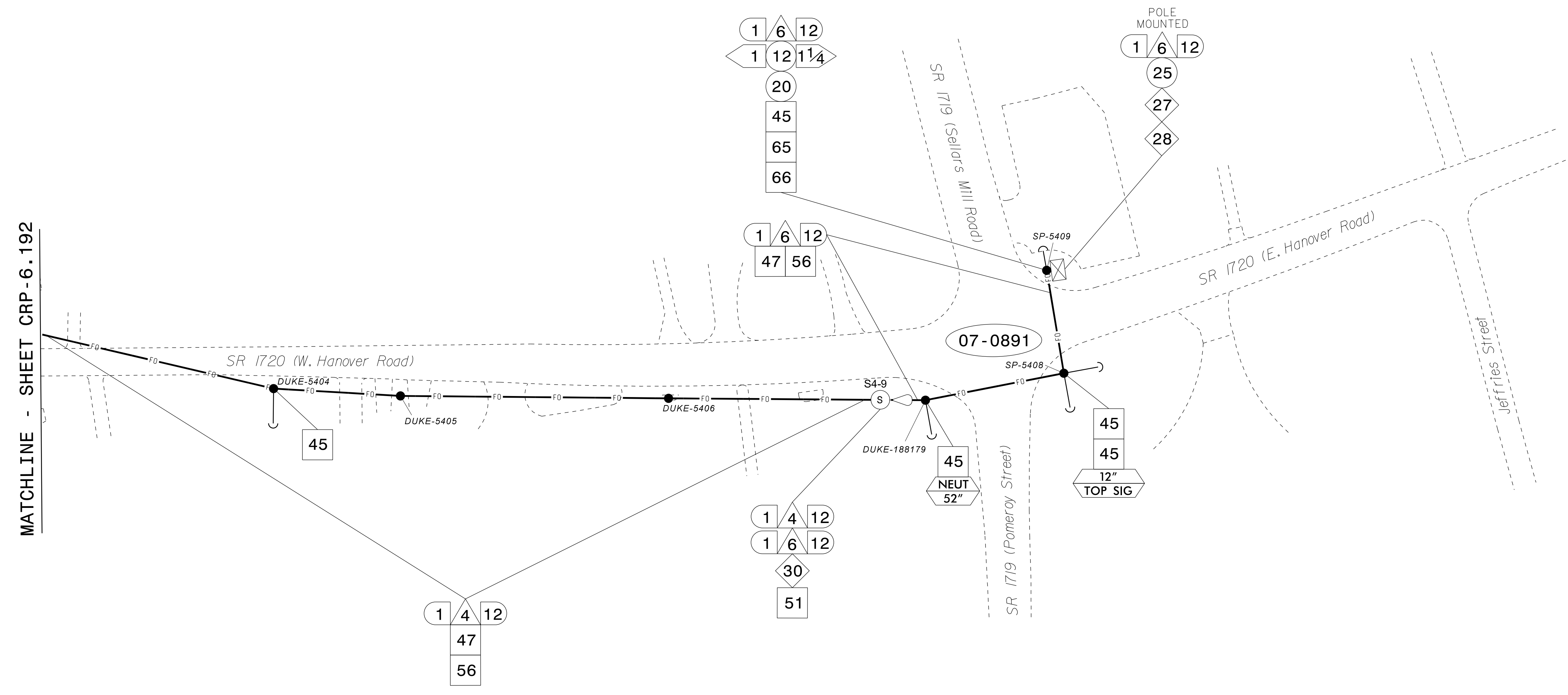
REVISIONS INIT. DATE

SCALE 0 50
1"=50'

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
MELISSA B. TOTH
025892
13/2018
DATE

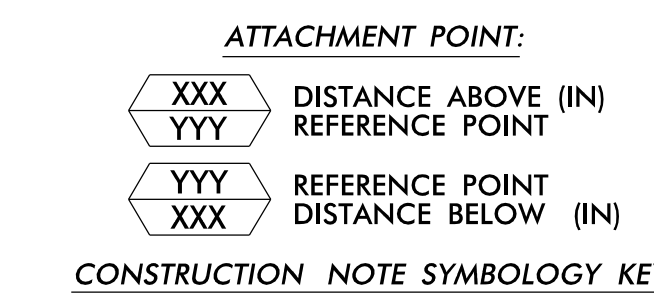
CADD File name: CL-192.dgn

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB /CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

13-JUN-2018 15:45
 01:TCOSPOPT100056469 U-6015 B-G Sfg SysTask 11_CL-CL-193.dgn
 ENCA5398 AT LUS330048



1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE /HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
 RALEIGH, NORTH CAROLINA 27609
 (919) 876-8888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

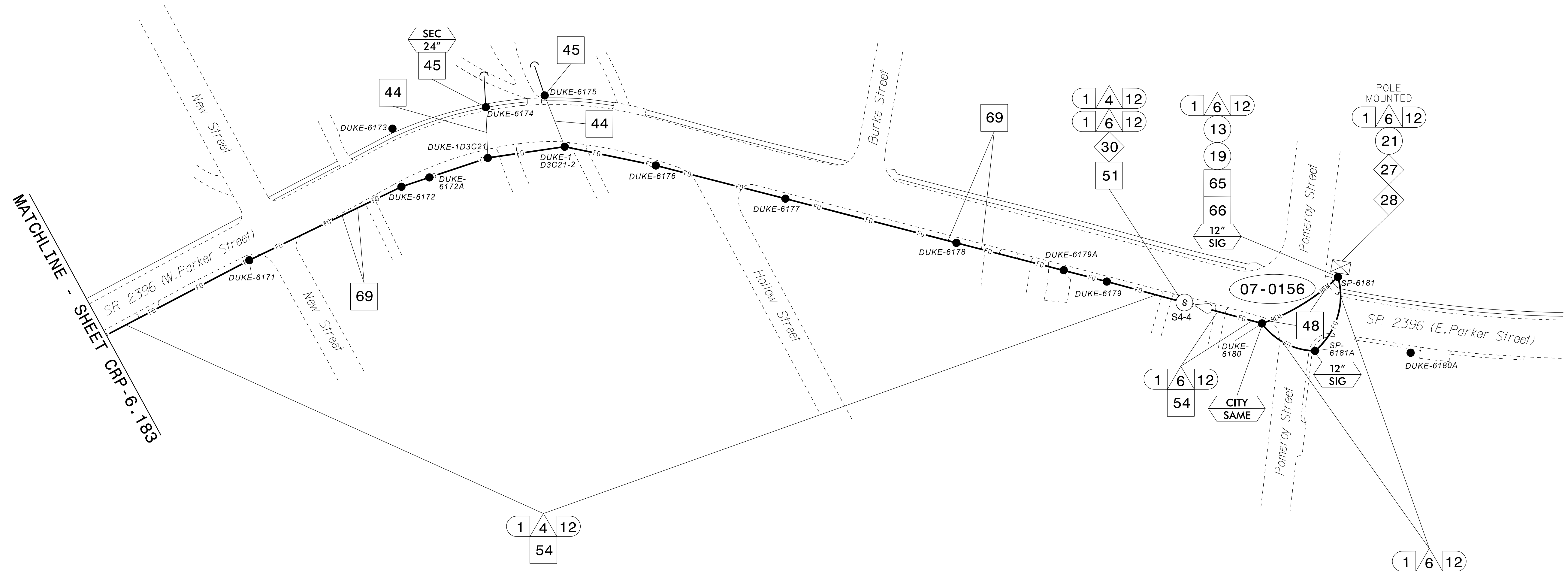
Prepared for the Offices of:
Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth
 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

750 Greenfield Parkway, Garner, NC 27529
 SCALE 1"=50'

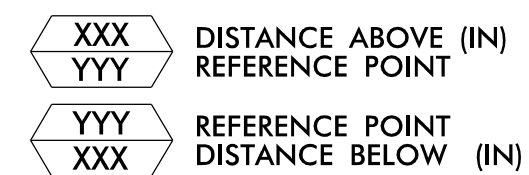
Melissa B. Toth
 0980CF8E0404AF DATE 13/2018
 CADD Filename: CL-193.dgn



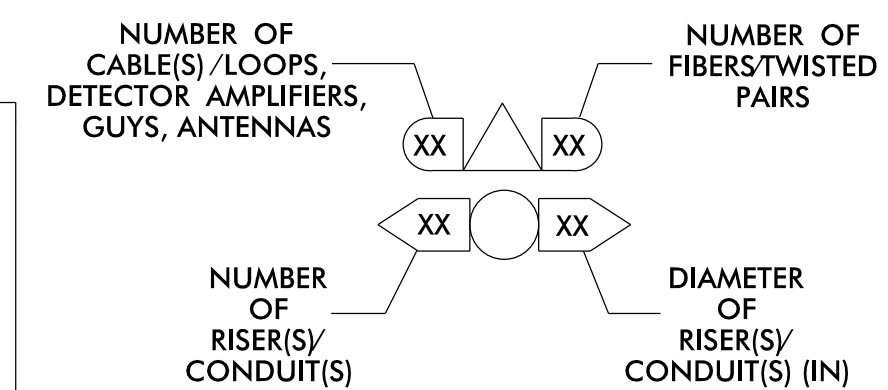
NOTES:

- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:



CONSTRUCTION NOTE SYMBOLOLOGY KEY



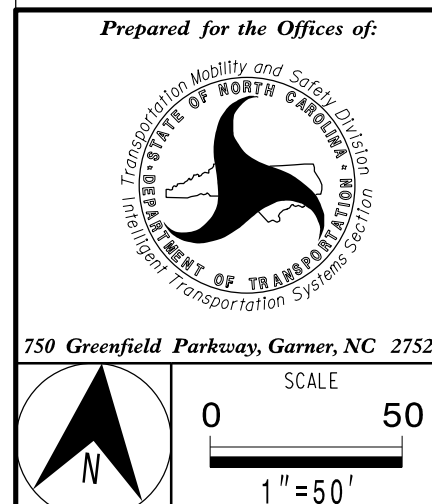
ATKINS

1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEE5 #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

13-JUN-2018 15:46
0:42:33
C:\Users\pjt\Documents\Burlington-Graham Signal System\Task 11_CL\CL-194.dgn
ENC4533048 AT LUS333048

1	INSTALL CATEGORY 6 CABLE	11	INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22	INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32	MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43	REMOVE EXISTING WOOD POLE	55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	66	BOND RISER TO POLE GROUND
2	INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12	INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23	INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33	REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44	INSTALL AERIAL GUY ASSEMBLY	56	LASH CABLE(S) TO NEW MESSENGER CABLE	67	BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3	INSTALL COMPOSITE CCTV CABLE	13	INSTALL HEAT SHRINK TUBING KIT	24	INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34	INSTALL CABINET FOUNDATION	45	INSTALL STANDARD GUY ASSEMBLY	57	MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68	BOND TRACER WIRE TO POLE GROUND
4	INSTALL SMFO CABLE	14	INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25	INSTALL NEW RISER INTO POLE MOUNTED CABINET	35	REMOVE EXISTING CABINET FOUNDATION	46	INSTALL SIDEWALK GUY ASSEMBLY	58	INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69	HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5	INSTALL COAXIAL ANTENNA CABLE	15	DIRECTIONAL DRILL CONDUIT	26	INSTALL DIGITAL VIDEO ENCODER	36	INSTALL CCTV CAMERA ASSEMBLY	47	INSTALL MESSENGER CABLE	59	INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70	INSTALL CCTV CABINET DISCONNECT
6	INSTALL FIBER-OPTIC DROP CABLE	16	BORE AND JACK CONDUIT	27	INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37	INSTALL CCTV WOOD POLE	48	REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60	INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71	INSTALL MANAGED ETHERNET SWITCH
7	INSTALL TRACER WIRE	17	INSTALL CABLE(S) IN EXISTING CONDUIT	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38	INSTALL STANDARD SIZE JUNCTION BOX	49	REMOVE EXISTING COMMUNICATIONS CABLE	60A	INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72	INSTALL CCTV METAL POLE
8	INSTALL CONDUIT UNDERGROUND	18	INSTALL CABLE(S) IN NEW CONDUIT	29	INSTALL UNDERGROUND SPLICE ENCLOSURE	39	INSTALL SPECIAL-SIZED JUNCTION BOX	50	INSTALL SERVICE CONDUCTORS	61	REMOVE EXISTING CCTV CAMERA ASSEMBLY	73	REMOVE EXISTING CCTV METAL POLE
9	INSTALL PVC CONDUIT	19	INSTALL CABLE(S) IN EXISTING RISER(S)	30	INSTALL AERIAL SPLICE ENCLOSURE	40	INSTALL OVER-SIZED JUNCTION BOX	51	INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62	NEW CABINET ENTRANCE INTO NEW FOUNDATION	74	REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10	INSTALL RIGID, GALVANIZED STEEL CONDUIT	20	INSTALL CABLE(S) IN NEW RISER(S)	31	INSTALL SPLICE CABINET	41	REMOVE EXISTING JUNCTION BOX	52	INSTALL DELINEATOR MARKER	63	DRILL/CORE DRILL EXISTING FOUNDATION	75	BACKPULL AND COIL CITY IT CABLE
						42	INSTALL WOOD POLE	53	STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	76	INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA		
								54	LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	77	INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)		



Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

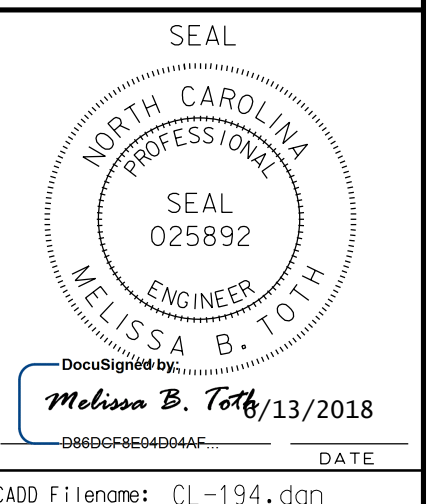
PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: AWE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

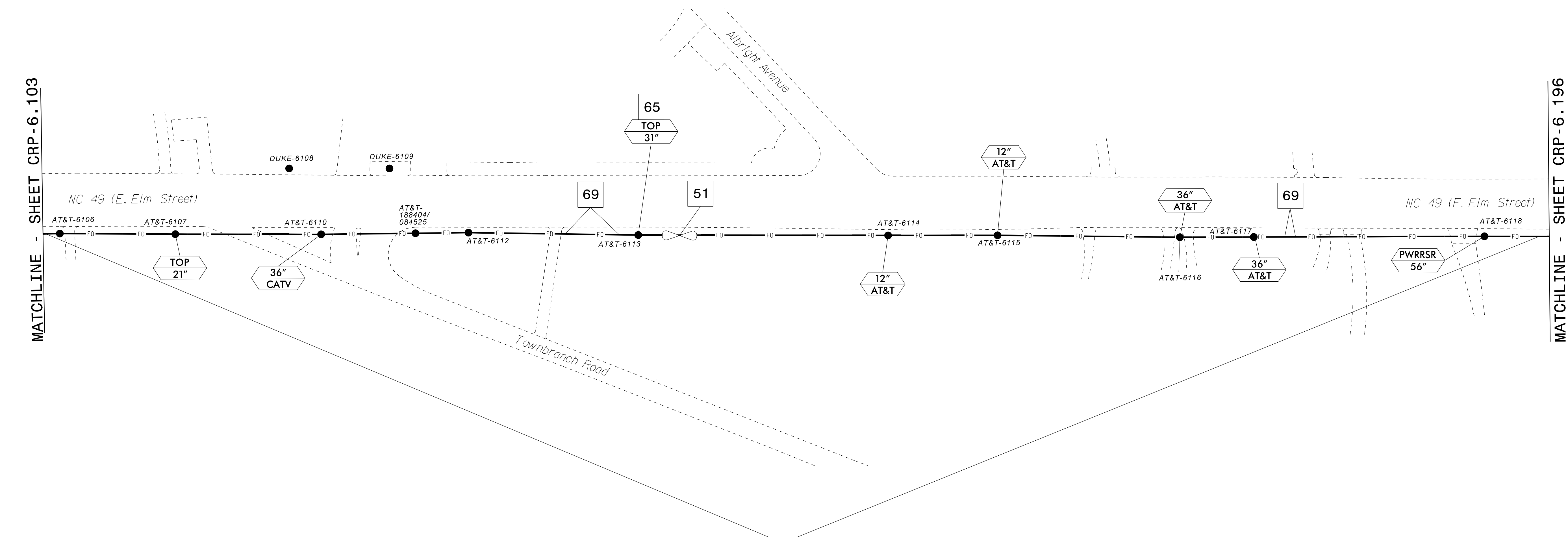
750 Greenfield Parkway, Garner, NC 27529

SCALE 0 50 1"=50'

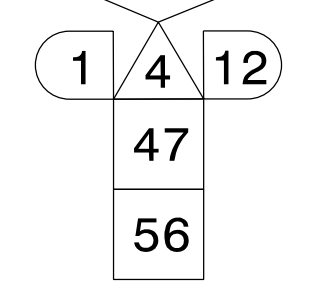
REVISIONS	INIT.	DATE



CADD File name: CL-194.dgn



NOTES:
 1. UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



ATTACHMENT POINT:
 XXX DISTANCE ABOVE (IN)
 YYY REFERENCE POINT
 YYY REFERENCE POINT
 XXX DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY
 NUMBER OF CABLE(S) / LOOPS, DETECTOR / AMPLIFIERS, GUYS, ANTENNAS: XX
 NUMBER OF FIBER/TWISTED PAIRS: XX
 NUMBER OF RISER(S) / CONDUIT(S): XX
 DIAMETER OF RISER(S) / CONDUIT(S) (IN): XX

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
 RALEIGH, NORTH CAROLINA 27609
 (919) 878-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:

 State of North Carolina
 Department of Transportation

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

SCALE: 1"=50'

750 Greenfield Parkway, Garner, NC 27529

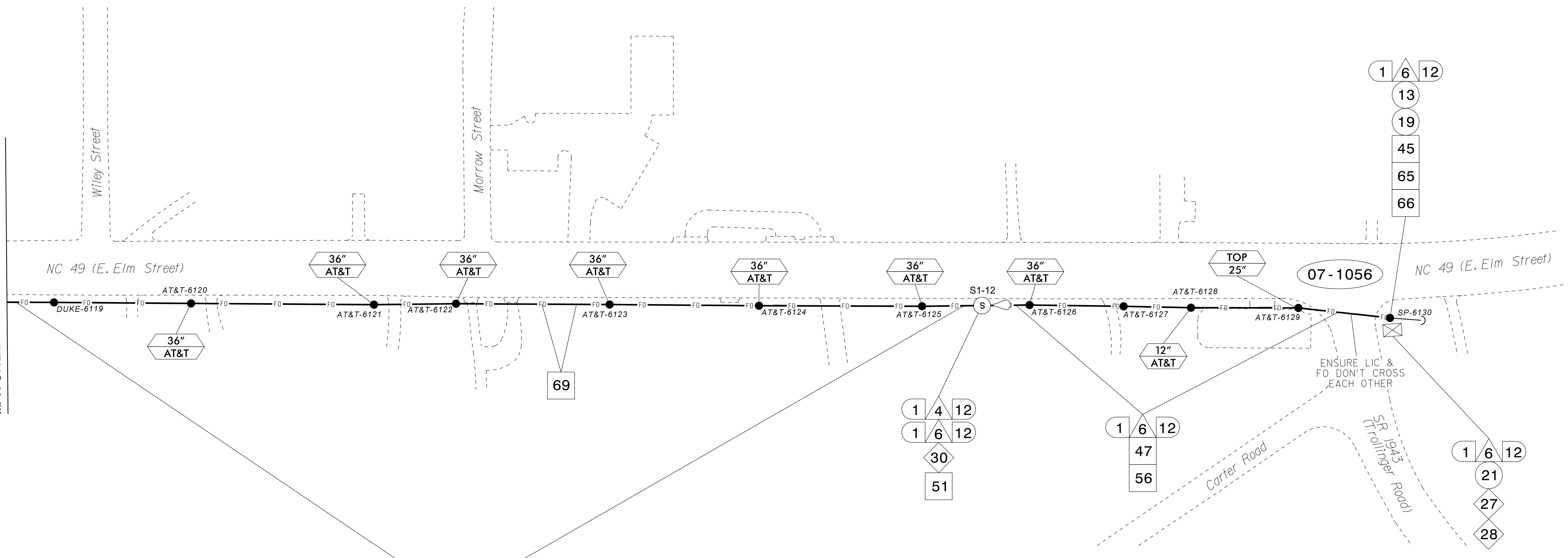
DocuSign by: Melissa B. Toth 11/13/2018

CADD File name: CL-195.dgn

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

13-JUN-2018 15:46
 0:\work\proj\10056469 U-6015 B-G Sig Sys\Task 11_C1\CL-195.dgn
 ENCA5396 AT LUS330048

MATCHLINE - SHEET CRP-6.195



- NOTES:**
- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

ATTACHMENT POINT:

XXX
YYY DISTANCE ABOVE (IN)
REFERENCE POINT

YYY
XXX REFERENCE POINT
DISTANCE BELOW (IN)

CONSTRUCTION NOTE SYMBOLOLOGY KEY

NUMBER OF CABLE(S) / LOOPS, DETECTOR, AMPLIFIERS, GUYS, ANTENNAS: XX

NUMBER OF RISER(S) / CONDUIT(S): XX

NUMBER OF FIBER/TWISTED PAIRS: XX

DIAMETER OF RISER(S) / CONDUIT(S) (IN): XX

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS INIT. DATE

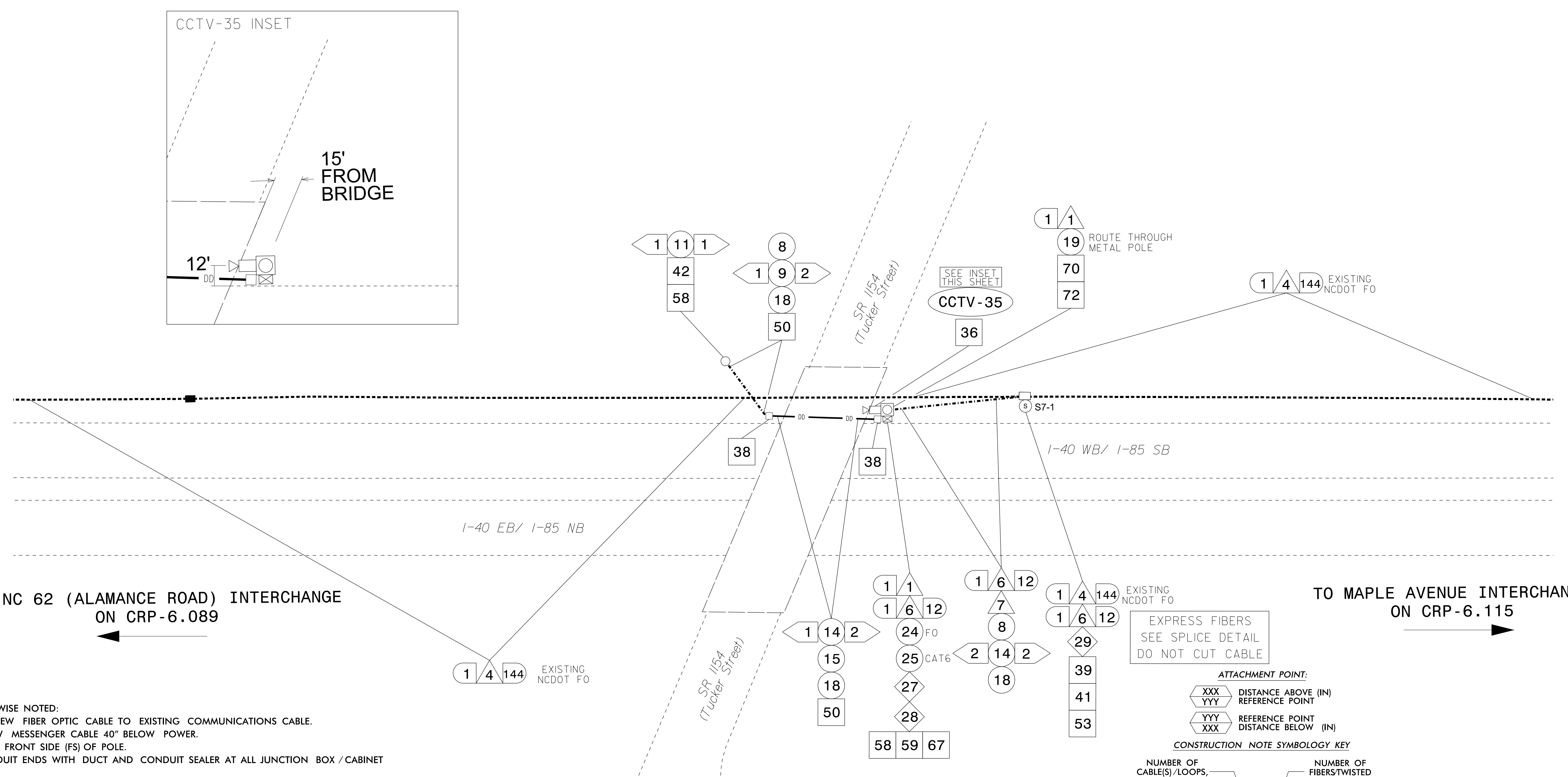
SCALE 0 50 1"=50'

750 Greenfield Parkway, Garner, NC 27529

DocuSign by: Melissa B. Toth 08/08/2018 13:01:13/2018

CADD File name: CL-196.dgn

13-JUN-2018 15:46
0:\work\proj\10056469 U-6015 B-G Sig Sys\Task 11_CL-196.dgn
ENC45386 AT LUS333048

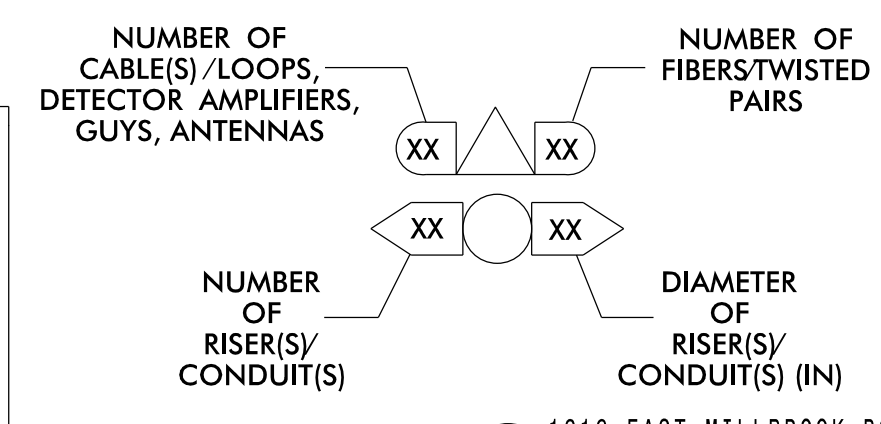


TO NC 62 (ALAMANCE ROAD) INTERCHANGE ON CRP-6.089 ←

TO MAPLE AVENUE INTERCHANGE ON CRP-6.115 →

EXPRESS FIBERS
SEE SPLICE DETAIL
DO NOT CUT CABLE

ATTACHMENT POINT:
 XXX YYY DISTANCE ABOVE (IN) REFERENCE POINT
 YYY XXX REFERENCE POINT DISTANCE BELOW (IN)
CONSTRUCTION NOTE SYMBOLOLOGY KEY



NOTES:

- UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
- SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.

1 INSTALL CATEGORY 6 CABLE	11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22 INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32 MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43 REMOVE EXISTING WOOD POLE	55 LASH CABLE(S) TO EXISTING MESSENGER CABLE	66 BOND RISER TO POLE GROUND
2 INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12 INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23 INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33 REMOVE EXISTING SPLICE / HUB / CCTV CABINET	44 INSTALL AERIAL GUY ASSEMBLY	56 LASH CABLE(S) TO NEW MESSENGER CABLE	67 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3 INSTALL COMPOSITE CCTV CABLE	13 INSTALL HEAT SHRINK TUBING KIT	24 INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34 INSTALL CABINET FOUNDATION	45 INSTALL STANDARD GUY ASSEMBLY	57 MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68 BOND TRACER WIRE TO POLE GROUND
4 INSTALL SMFO CABLE	14 INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25 INSTALL NEW RISER INTO POLE MOUNTED CABINET	35 REMOVE EXISTING CABINET FOUNDATION	46 INSTALL SIDEWALK GUY ASSEMBLY	58 INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69 HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5 INSTALL COAXIAL ANTENNA CABLE	15 DIRECTIONAL DRILL CONDUIT	26 INSTALL DIGITAL VIDEO ENCODER	36 INSTALL CCTV CAMERA ASSEMBLY	47 INSTALL MESSENGER CABLE	59 INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70 INSTALL CCTV CABINET DISCONNECT
6 INSTALL FIBER-OPTIC DROP CABLE	16 BORE AND JACK CONDUIT	27 INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37 INSTALL CCTV WOOD POLE	48 REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60 INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71 INSTALL MANAGED ETHERNET SWITCH
7 INSTALL TRACER WIRE	17 INSTALL CABLE(S) IN EXISTING CONDUIT	28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38 INSTALL STANDARD SIZE JUNCTION BOX	49 REMOVE EXISTING COMMUNICATIONS CABLE	60A INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72 INSTALL CCTV METAL POLE
8 INSTALL CONDUIT UNDERGROUND	18 INSTALL CABLE(S) IN NEW CONDUIT	29 INSTALL UNDERGROUND SPLICE ENCLOSURE	39 INSTALL SPECIAL-SIZED JUNCTION BOX	50 INSTALL SERVICE CONDUCTORS	61 REMOVE EXISTING CCTV CAMERA ASSEMBLY	73 REMOVE EXISTING CCTV METAL POLE
9 INSTALL PVC CONDUIT	19 INSTALL CABLE(S) IN EXISTING RISER(S)	30 INSTALL AERIAL SPLICE ENCLOSURE	40 INSTALL OVER-SIZED JUNCTION BOX	51 INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62 NEW CABINET ENTRANCE INTO NEW FOUNDATION	74 REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10 INSTALL RIGID, GALVANIZED STEEL CONDUIT	20 INSTALL CABLE(S) IN NEW RISER(S)	31 INSTALL SPLICE CABINET	41 REMOVE EXISTING JUNCTION BOX	52 INSTALL DELINEATOR MARKER	63 DRILL/CORE DRILL EXISTING FOUNDATION	75 BACKPULL AND COIL CITY IT CABLE
			42 INSTALL WOOD POLE	53 STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64 INTERCEPT AND REROUTE EXISTING CONDUITS	76 INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54 LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65 BOND MESSENGER TO POLE GROUND	77 INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 REVIEWED BY: M B Toth

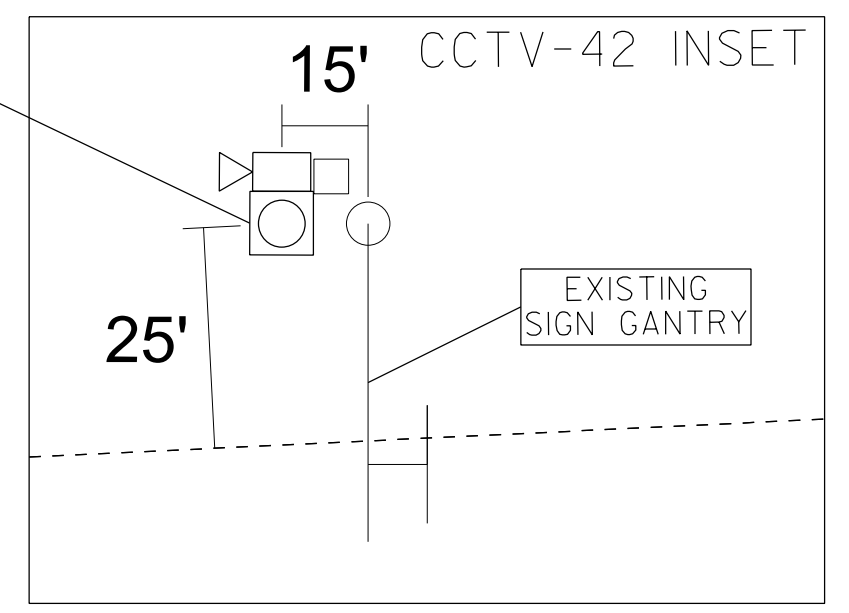
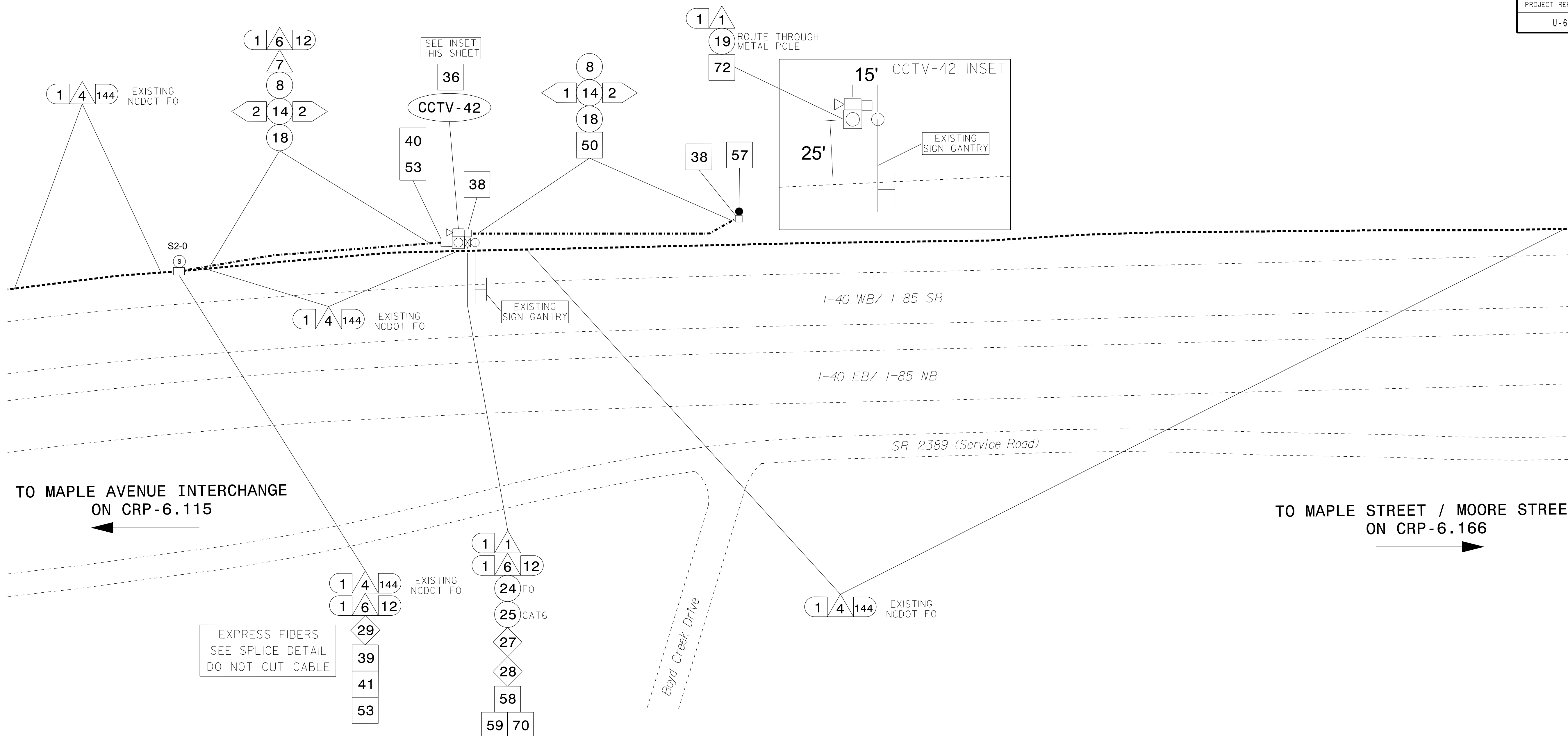
PREPARED BY: ANE/AJH/VJP/NAP/JAW REVIEWED BY: BJ Slocum

REVISIONS	INIT.	DATE

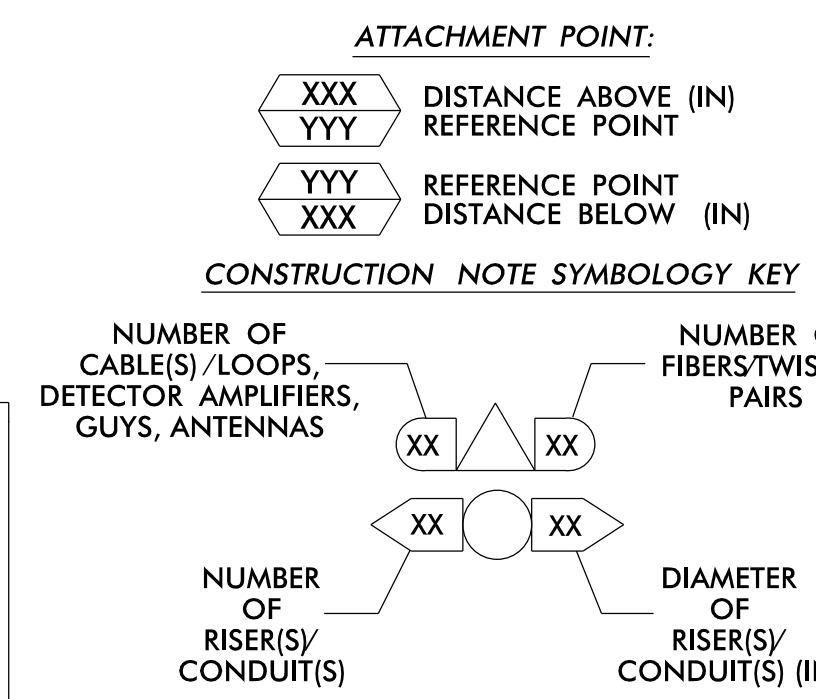
SCALE: 1"=50'

DocuSign by: Melissa B. Toth 025892 ENGINEER

13/JUN/2018 15:46
0:*tcncspport\att\cnc\c\curr\100056469 U-6015 B-G Sig Sys\Task 11...CL-198.dgn



- NOTES:**
- 1. UNLESS OTHERWISE NOTED:
 - OVERLASH NEW FIBER OPTIC CABLE TO EXISTING COMMUNICATIONS CABLE.
 - ATTACH NEW MESSENGER CABLE 40" BELOW POWER.
 - ATTACH ON FRONT SIDE (FS) OF POLE.
 - 2. SEAL ALL CONDUIT ENDS WITH DUCT AND CONDUIT SEALER AT ALL JUNCTION BOX / CABINET ENTRANCES.



1. INSTALL CATEGORY 6 CABLE	11. INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD	22. INSTALL NEW CONDUIT INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	32. MODIFY EXISTING SPLICE ENCLOSURE OR INTERCONNECT CENTER	43. REMOVE EXISTING WOOD POLE	55. LASH CABLE(S) TO EXISTING MESSENGER CABLE	66. BOND RISER TO POLE GROUND
2. INSTALL LOW VOLTAGE POWER CABLE (24VAC)	12. INSTALL RIGID, GALVANIZED STEEL RISER WITH HEAT SHRINK TUBING	23. INSTALL NEW RISER INTO CABINET BASE (USE EX CABINET ENTRANCE WHEN AVAILABLE)	33. REMOVE EXISTING SPLICE /HUB / CCTV CABINET	44. INSTALL AERIAL GUY ASSEMBLY	56. LASH CABLE(S) TO NEW MESSENGER CABLE	67. BOND TRACER WIRE TO EQUIPMENT GROUND BUS
3. INSTALL COMPOSITE CCTV CABLE	13. INSTALL HEAT SHRINK TUBING KIT	24. INSTALL NEW CONDUIT INTO POLE MOUNTED CABINET	34. INSTALL CABINET FOUNDATION	45. INSTALL STANDARD GUY ASSEMBLY	57. MODIFY EXISTING ELECTRICAL SERVICE FOR CCTV	68. BOND TRACER WIRE TO POLE GROUND
4. INSTALL SMFO CABLE	14. INSTALL HIGH DENSITY POLYETHYLENE CONDUIT	25. INSTALL NEW RISER INTO POLE MOUNTED CABINET	35. REMOVE EXISTING CABINET FOUNDATION	46. INSTALL SIDEWALK GUY ASSEMBLY	58. INSTALL NEW ELECTRICAL SERVICE FOR CCTV OR RADIO	69. HANDLASH AND INSTALL AERIAL CABLE PROTECTOR
5. INSTALL COAXIAL ANTENNA CABLE	15. DIRECTIONAL DRILL CONDUIT	26. INSTALL DIGITAL VIDEO ENCODER	36. INSTALL CCTV CAMERA ASSEMBLY	47. INSTALL MESSENGER CABLE	59. INSTALL NEW POLE MOUNTED CCTV CABINET (336)	70. INSTALL CCTV CABINET DISCONNECT
6. INSTALL FIBER-OPTIC DROP CABLE	16. BORE AND JACK CONDUIT	27. INSTALL NEW ETHERNET EDGE SWITCH IN CABINET	37. INSTALL CCTV WOOD POLE	48. REMOVE EXISTING COMMUNICATIONS CABLE AND MESSENGER CABLE	60. INSTALL NEW CCTV CABINET (NEMA TYPE 4)	71. INSTALL MANAGED ETHERNET SWITCH
7. INSTALL TRACER WIRE	17. INSTALL CABLE(S) IN EXISTING CONDUIT	28. INSTALL INTERCONNECT CENTER, PATCH PANEL JUMPERS, AND FUSION SPLICE CABLE IN CABINET	38. INSTALL STANDARD SIZE JUNCTION BOX	49. REMOVE EXISTING COMMUNICATIONS CABLE	60A. INSTALL NEW POLE MOUNTED CABINET FOR ANTENNA (RADIO)	72. INSTALL CCTV METAL POLE
8. INSTALL CONDUIT UNDERGROUND	18. INSTALL CABLE(S) IN NEW CONDUIT	29. INSTALL UNDERGROUND SPLICE ENCLOSURE	39. INSTALL SPECIAL-SIZED JUNCTION BOX	50. INSTALL SERVICE CONDUCTORS	61. REMOVE EXISTING CCTV CAMERA ASSEMBLY	73. REMOVE EXISTING CCTV METAL POLE
9. INSTALL PVC CONDUIT	19. INSTALL CABLE(S) IN EXISTING RISER(S)	30. INSTALL AERIAL SPLICE ENCLOSURE	40. INSTALL OVER-SIZED JUNCTION BOX	51. INSTALL CABLE STORAGE GUIDE(S) [SNOW SHOE(S)] AND STORE 100 FEET OF EACH CABLE	62. NEW CABINET ENTRANCE INTO NEW FOUNDATION	74. REMOVE WIRELESS COMMUNICATIONS EQUIPMENT
10. INSTALL RIGID, GALVANIZED STEEL CONDUIT	20. INSTALL CABLE(S) IN NEW RISER(S)	31. INSTALL SPLICE CABINET	41. REMOVE EXISTING JUNCTION BOX	52. INSTALL DELINEATOR MARKER	63. DRILL/CORE DRILL EXISTING FOUNDATION	75. BACKPULL AND COIL CITY IT CABLE
			42. INSTALL WOOD POLE	53. STORE 30' OF COMMUNICATIONS CABLE (EACH CABLE)	64. INTERCEPT AND REROUTE EXISTING CONDUITS	76. INSTALL 2.4 GHZ RADIO AND PANEL ANTENNA
				54. LASH CABLE(S) TO EXISTING SIGNAL/COMMUNICATIONS CABLE	65. BOND MESSENGER TO POLE GROUND	77. INSTALL BASE MOUNTED CCTV CABINET WITH EXTENDER (336)

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

Burlington-Graham Signal System Cable Routing Plans

Division 7 Alamance County Burlington & Graham

PLAN DATE: June 2018 PREPARED BY: AME/AJH/VJP/NAP/JAW REVIEWED BY: M B Toth

REVISIONS: _____ INIT. DATE

SCALE: 1"=50'

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER MELISSA B. TOTH

DocuSign by: Melissa B. Toth 6/13/2018

CADD Filename: CL-199.dgn

13-JUN-2018 15:46
0-1*rcosporf011c0a*rcffic0curr*10056469 U-6015 B-G Sig Sys*task 11.CL.dgn-199.dgn
ENC45396 AT LUS333048

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

ALAMANCE COUNTY

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)

WORK AREA

REMOVAL

TEMPORARY PAVEMENT

SIGNALS

- EXISTING
- PROPOSED
- TEMPORARY

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- PORTABLE CONCRETE BARRIER (P.C.B.)
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

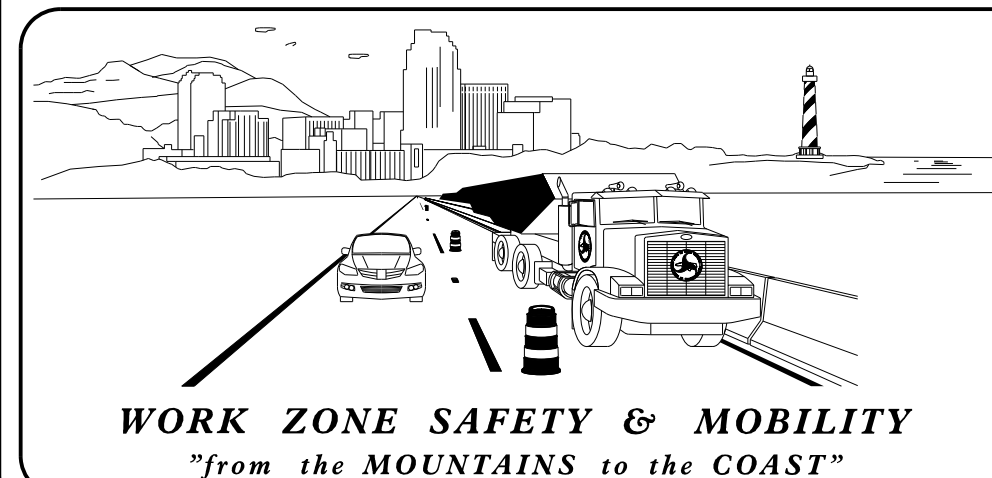
PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS SHOWN IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2018 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.03	TEMPORARY ROAD CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1115.01	FLASHING ARROW BOARDS
1130.01	DRUM
1135.01	CONES
1145.01	BARRICADES
1150.01	FLAGGERS
1165.01	TRUCK MOUNTED ATTENUATOR
1180.01	SKINNY DRUMS



PLANS PREPARED BY:

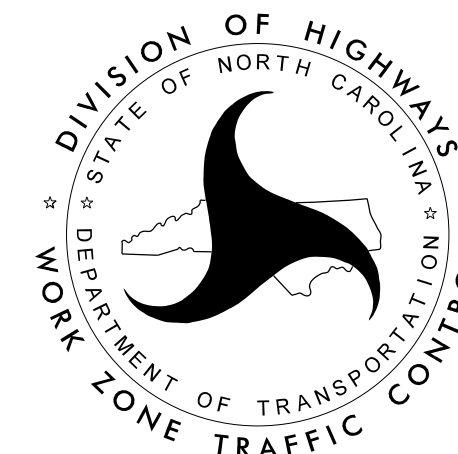
MELISSA B. TOTH, PE
PROJECT ENGINEER

PAMELA L. ALEXANDER, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACTS:

SHERRY YOW
PROJECT ENGINEER

WILLIAM B. HAIRSTON, III
PROJECT DESIGN ENGINEER



PLAN PREPARED FOR N.C.D.O.T. BY:

ATKINS

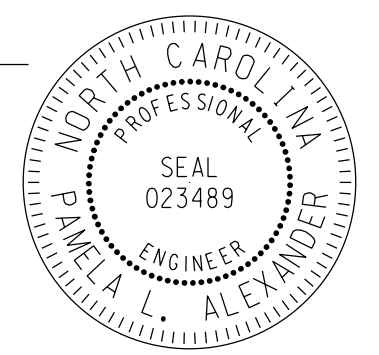
1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

APPROVED:
E79600AF4834AA

DATE: 6/12/2018

SEAL



INDEX OF SHEETS

SHEET NO.	TITLE
TMP-7.01	TITLE SHEET, INDEX OF SHEETS, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS AND LEGEND
TMP-7.02 - TMP-7.02A	TRAFFIC CONTROL NOTES
TMP-7.03	TRAFFIC CONTROL NARRATIVE
TMP-7.04	TYPICAL SIDEWALK CLOSURE AND PEDESTRIAN DETOUR

TRAFFIC CONTROL NOTES

PROJ. REFERENCE NO. U-6015	SHEET NO. TMP-7.02
-------------------------------	-----------------------

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>
I-40 / I-85 AND ALL RAMPS AND LOOPS	6:00 AM TO 7:00 PM MONDAY THROUGH SUNDAY

ALL STREETS CITYWIDE WITHIN THE CITY OF BURLINGTON AND THE CITY OF GRAHAM, UNLESS PRIOR APPROVAL IS GIVEN TO VARY FROM THIS SCHEDULE AT LEAST ONE WEEK IN ADVANCE FROM THE NCDOT AND THE CITY OF BURLINGTON.

7:00 AM TO 9:00 AM
4:00 PM TO 6:30 PM
MONDAY THROUGH FRIDAY

B) DO NOT CLOSE OR NARROW TRAVEL LANES DURING HOLIDAYS AND SPECIAL EVENTS AS FOLLOWS:

<u>ROAD NAME</u>
I-40 / I-85 AND ALL RAMPS AND LOOPS

ALL STREETS CITYWIDE WITHIN THE CITY OF BURLINGTON AND THE CITY OF GRAHAM, UNLESS PRIOR APPROVAL IS GIVEN TO VARY FROM THIS SCHEDULE AT LEAST ONE WEEK IN ADVANCE FROM THE NCDOT AND THE CITY OF BURLINGTON.

HOLIDAY

1. FOR ANY UNEXPECTED OCCURRENCE THAT CREATES UNUSUALLY HIGH TRAFFIC VOLUMES, AS DIRECTED BY THE ENGINEER.
2. FOR NEW YEAR'S, BETWEEN THE HOURS OF 6:00 AM DECEMBER 31st TO 7:00 PM JANUARY 2ND. IF NEW YEAR'S DAY IS ON A FRIDAY, SATURDAY, SUNDAY, OR MONDAY THEN UNTIL 7:00 PM THE FOLLOWING TUESDAY.
3. FOR EASTER, BETWEEN THE HOURS OF 6:00 AM THURSDAY AND 7:00 PM MONDAY.
4. FOR MEMORIAL DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY TO 7:00 PM TUESDAY.
5. FOR INDEPENDENCE DAY, BETWEEN THE HOURS OF 6:00 AM THE DAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE DAY AFTER INDEPENDENCE DAY.
6. IF INDEPENDENCE DAY IS ON A FRIDAY, SATURDAY, SUNDAY OR MONDAY THEN BETWEEN THE HOURS OF 6:00 AM THE THURSDAY BEFORE INDEPENDENCE DAY AND 7:00 PM THE TUESDAY AFTER INDEPENDENCE DAY.
7. FOR LABOR DAY, BETWEEN THE HOURS OF 6:00 AM FRIDAY AND 7:00 PM TUESDAY.
8. FOR THANKSGIVING DAY, BETWEEN THE HOURS OF 6:00 AM TUESDAY TO 7:00 PM MONDAY.

SPECIAL EVENTS

9. FOR CHRISTMAS, BETWEEN THE HOURS OF 6:00 AM THE FRIDAY BEFORE THE WEEK OF CHRISTMAS DAY AND 7:00 PM THE FOLLOWING TUESDAY AFTER THE WEEK OF CHRISTMAS.
10. FOR WEEKENDS DURING THE HOLIDAY SHOPPING PERIOD AT ALAMANCE CROSSING AND UNIVERSITY COMMONS BETWEEN THE WEEKEND OF THANKSGIVING AND THE WEEKEND OF CHRISTMAS, BETWEEN THE HOURS OF 9:00 AM AND 9:00 PM ON BOTH SATURDAY AND SUNDAY. (THIS NOTE ONLY APPLIES TO UNIVERSITY DRIVE, BOONE STATION DRIVE AND HUFFMAN MILL ROAD).
11. FOR BURLINGTON ROYALS HOME GAMES OCCURRING AT BURLINGTON ATHLETIC STADIUM, BETWEEN FOUR (4) HOURS BEFORE THE START OF THE GAME AND FOUR (4) HOURS AFTER THE END OF EACH OF THE BURLINGTON ROYALS HOME GAMES. (THIS NOTE ONLY APPLIES TO THE PORTIONS OF GRAHAM STREET, BEAUMONT AVENUE AND WEST HANOVER ROAD THAT ARE ADJACENT TO OR APPROACHING THE STADIUM).
12. DO NOT CLOSE OR NARROW TRAVEL LANES OR CLOSE SIDEWALKS OR PEDESTRIAN CROSSINGS WITHIN 1/2 MILE OF A SCHOOL DURING ARRIVAL AND DISMISSAL HOURS ON A SCHOOL DAY. COORDINATE WITH THE AFFECTED SCHOOL CONCERNING OPERATIONAL HOURS AND SCHOOL DAYS. AS A MINIMUM, DO NOT CLOSE OR NARROW A LANE OR CLOSE A SIDEWALK OR PEDESTRIAN CROSSING DURING HOURS POSTED ON SCHOOL SPEED ZONE SIGNS (WHEN PRESENT).
13. DO NOT CLOSE OR NARROW TRAVEL LANES OR CLOSE SIDEWALKS OR PEDESTRIAN CROSSINGS ANYWHERE WITHIN THE DOWNTOWN CENTRAL BUSINESS DISTRICT OF BURLINGTON BETWEEN 1 (ONE) HOUR BEFORE AND 1 (ONE) AFTER ANY PLANNED SPECIAL EVENTS AS SHOWN ON THE CITY OF BURLINGTON PARKS AND RECREATION DEPARTMENT'S SPECIAL EVENT CALENDAR.

C) DO NOT STOP TRAFFIC AS FOLLOWS:

<u>ROAD NAME</u>	<u>DAY AND TIME RESTRICTIONS</u>	<u>DURATION AND OPERATION</u>
ALL ROADS	MON. - SUN. 5:00 AM TO 11:00 PM	10 MINUTES INSTALLING CABLE ACROSS ROAD (USING RSD. 1101.03, SHEETS 8 & 9 OF 9)

- D) NO WORK IS TO TAKE PLACE WITHIN 300 FEET OF A RESIDENTIAL AREA BETWEEN THE HOURS OF 10:00 PM AND 7:00 AM.
- E) ACCESS TO THE TRAFFIC CONTROL CENTER (TCC) OR ANY GOVERNMENTAL BUILDING WITHIN THE CITY OF BURLINGTON OR THE CITY OF GRAHAM WILL BE ALLOWED ON A NORMAL BASIS DURING THE HOURS OF 8:00 AM TO 5:00 PM, MONDAY THROUGH FRIDAY (EXCEPT FOR AS NOTED UNDER "HOLIDAY"). A KEY AND DOOR CODE CAN BE PROVIDED TO THE CONTRACTOR TO ACCESS THE TCC OR ANY OF THE SIGNAL WORKSHOP AREAS IN THE CITY OF BURLINGTON PUBLIC WORKS BUILDING DURING HOURS OTHER THAN THESE. CITY STAFF WILL NOT BE AVAILABLE DURING THESE OFF TIMES IN THE TCC OR THE PUBLIC WORKS BUILDING.

07-AUG-2018 11:57 AM
C:\Users\alexa338\AppData\Local\Temp\U-6015-TCP-7.02.dgn
ALEX338

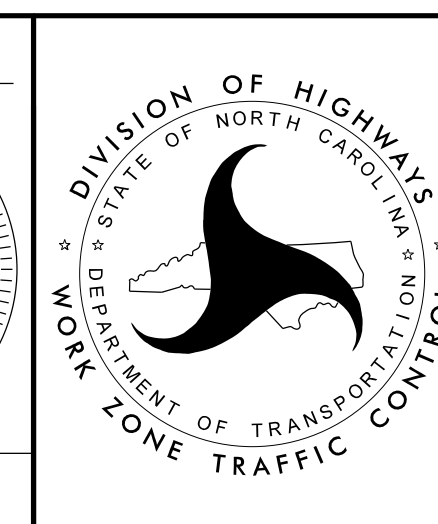
ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-8888 NCBES #F-0326

APPROVED *Pamela Alexander*
DATE: 8/7/2018

DocuSigned by:
Pamela Alexander
E79609AF4838AAA

SEAL
023489
ENGINEER
PAMELA L. ALEXANDER

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



(CONTINUED ON TMP-7.02A)

**TRANSPORTATION
OPERATIONS
PLAN**

TRAFFIC CONTROL NOTES

PROJ. REFERENCE NO.	SHEET NO.
U-6015	TMP-7.02A

(CONTINUED FROM TMP-7.02)

LANE AND SHOULDER CLOSURE REQUIREMENTS

- F) ON STREETS WHERE POSTED SPEED LIMIT IS 40 MPH OR LESS AND WORK IS ON THE SHOULDER, CLOSE THE SHOULDER USING RSD 1101.04 OR USE A SHOULDER CLOSURE WITH MINOR ENCROACHMENT INTO THE ADJACENT TRAFFIC LANE AS SHOWN IN MUTCD. FIGURE 6H-6, "SHOULDER WORK WITH MINOR ENCROACHMENT (TA-6)." WHEN USING TA-6, COMPLY WITH THE APPLICATION NOTES ON MUTCD PAGE 6H-16, AND MAINTAIN A MINIMUM OF 10-FT TRAVEL LANE. CLOSE AFFECTED SIDEWALKS AND PEDESTRIAN PATHS. WHERE A 10FT. OR GREATER TRAVEL LANE CANNOT BE MAINTAINED OR AS DIRECTED BY THE ENGINEER, CLOSE THE ADJACENT TRAFFIC LANE USING RSD 1101.02, SHEETS 1 THRU 4 OF 14.

- G) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED, OR AS DIRECTED BY THE ENGINEER.

- H) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

- I) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

- J) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE ROADWAY STANDARD DRAWINGS OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

- K) DO NOT INSTALL MORE THAN ONE LANE CLOSURE IN ANY ONE DIRECTION ON ANY ROADWAY.

SIGNING

- L) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

- M) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

- N) THE WORD "SIGNAL" OR "UTILITY" MAY BE USED IN LIEU OF "ROAD" ON W20-1 (ROAD WORK AHEAD) SIGNS G20-2a (END ROAD WORK) SIGNS. HOWEVER, DO NOT INTERMIX SIGNS.

- O) USE PORTABLE SIGN SUPPORTS IN LIEU OF STATIONARY SIGN SUPPORTS FOR ALL WORKZONE SIGNS UNLESS THE ENGINEER DIRECTS OTHERWISE.

TRAFFIC CONTROL DEVICES

- P) WHEN LANE CLOSURES ARE NOT IN EFFECT, SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

- Q) PLACE ADDITIONAL SETS OF THREE CHANNELIZING DEVICES (DRUMS) PERPENDICULAR TO THE EDGE OF TRAVELWAY ON 500 FT CENTERS WHEN UNOPENED LANES ARE CLOSED TO TRAFFIC.

PEDESTRIANS

- R) CONTRACTOR SHALL MAINTAIN PEDESTRIAN MOBILITY WITHIN CONSTRUCTION AREAS AT ALL TIMES. AT LOCATIONS WHERE A PORTION OF SIDEWALK MUST BE REMOVED TEMPORARILY FOR CONSTRUCTION OPERATIONS, CLOSE THE AFFECTED SECTION OF SIDEWALK AND DETOUR PEDESTRIANS TO THE OTHER SIDE OF THE STREET AS SHOWN ON TMP-7.04. WHERE A PEDESTRIAN DETOUR IS NOT FEASIBLE, PROVIDE A TEMPORARY FOOTPATH CONSTRUCTED OF SUITABLE MATERIALS FOR PEDESTRIANS TO WALK AROUND THE WORK AREA AS DIRECTED AND APPROVED BY THE ENGINEER. REPLACE THE REMOVED SIDEWALK WITH LIKE MATERIALS AND REOPEN TO PEDESTRIAN TRAFFIC WITHIN 5 CALENDAR DAYS OF INITIAL REMOVAL. REFER TO THE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL, MORE SPECIFIC REQUIREMENTS.

- S) MAINTAIN REASONABLE AND SAFE PEDESTRIAN ACCESS TO ALL BUSINESSES, SCHOOLS AND DWELLINGS IN AREAS AFFECTED BY CONSTRUCTION AT ALL TIMES.

- T) REFER TO MUTCD SECTION 6D.01, "PEDESTRIAN CONSIDERATIONS" AND SECTION 6D.02, "ACCESSIBILITY CONSIDERATIONS" FOR ADDITIONAL REQUIREMENTS AND CONSIDERATIONS FOR MAINTAINING PEDESTRIAN MOBILITY THROUGH WORK AREA.

- U) WHEN CONSTRUCTION ACTIVITIES WILL BLOCK PEDESTRIAN ACCESS TO PEDESTRIAN SIGNAL PUSHBUTTONS, NOTIFY THE ENGINEER AT LEAST 24 HOURS IN ADVANCE OF SUCH WORK TO HAVE THE TRAFFIC SIGNAL PLACED ON PEDESTRIAN RECALL.

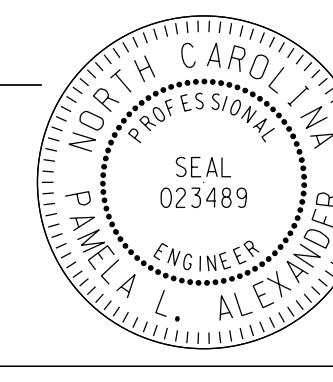
MISCELLANEOUS

- V) LAW ENFORCEMENT MAY BE USED TO MAINTAIN TRAFFIC THROUGH THE WORK AREA AND/OR INTERSECTIONS, AS DIRECTED AND APPROVED IN ADVANCE BY THE ENGINEER, AND SUBJECT TO THE AFOREMENTIONED TIME RESTRICTIONS.

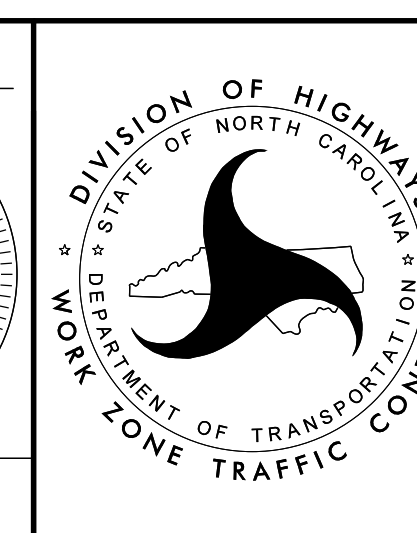
12-JUN-2018 13:53
 I:\Projects\2018\06\06\Projects\USRLA\Transportation\Traffic\Currr\00056469 U-6015 B-G Sig Sys\Task Il_Typ_SD\TMP\U-6015_TC_TCP_7.02A.dgn
 ALEXANDER, AT LUS340649

APPROVED: *Pamela Alexander*
E79605AF4838AAA

DATE: 6/12/2018



**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**



TRANSPORTATION
 OPERATIONS
 PLAN

TRAFFIC CONTROL NARRATIVE

STEP 1: PERFORM ALL WORK ASSOCIATED WITH THE INSTALLATION OF THE PROPOSED SIGNALS AND TRAFFIC MANAGEMENT SYSTEM AS SHOWN IN THE CONTRACT, CONSTRUCTION PLANS AND/OR SPECIAL PROVISIONS IN ACCORDANCE WITH THE "NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES - JANUARY 2018".

NOTE: ADDRESS ANY SAFETY HAZARDS CONCERNING MOTORISTS AND PEDESTRIANS BEFORE REMOVING TEMPORARY TRAFFIC CONTROL DEVICES AND WORK ZONE WARNING SIGNS. RETURN TRAFFIC TO ITS EXISTING TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.

NOTE: INSTALL CHANGEABLE MESSAGE SIGNS IN ADVANCE OF THE WORK ZONE AS DIRECTED BY THE ENGINEER.

NOTE: REMOVE ALL TEMPORARY TRAFFIC CONTROL LANE CLOSURE DEVICES AND RETURN TRAFFIC TO ITS EXISTING TRAFFIC PATTERN AT THE END OF EACH WORK PERIOD.

NOTE: WHEN CHANGING OUT CONTROLLER CABINETS, USE LAW ENFORCEMENT TO DIRECT TRAFFIC THROUGH THE INTERSECTION WHILE TRAFFIC SIGNAL IS NOT IN OPERATION. DO NOT TAKE TRAFFIC SIGNAL OUT OF OPERATION FOR MORE THAN 3 HOURS AT A GIVEN INTERSECTION. DO NOT TAKE ANY TRAFFIC SIGNAL OUT OF OPERATION TO PERFORM CONTROLLER CABINET CHANGEOUT BETWEEN THE HOURS OF 3:00 PM AND 9:00 AM THE FOLLOWING MORNING.

NOTE: CONSTRUCT NEW CONDUIT ENTRANCES INTO EXISTING CONTROLLER CABINET FOUNDATIONS WHILE MAINTAINING THE OPERATIONS OF THE EXISTING TRAFFIC SIGNAL WHEREVER POSSIBLE. WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF OPERATION TO CONSTRUCT A CONDUIT ENTRANCE INTO AN EXISTING CONTROLLER CABINET FOUNDATION AND SUBJECT TO THE ENGINEER'S APPROVAL, USE LAW ENFORCEMENT TO DIRECT TRAFFIC THROUGH THE INTERSECTION WHILE THE TRAFFIC SIGNAL IS NOT IN OPERATION. DO NOT TAKE A TRAFFIC SIGNAL OUT OF OPERATION WITHOUT THE PRIOR APPROVAL OF THE ENGINEER AND DO NOT TAKE THE TRAFFIC SIGNAL OUT OF OPERATION FOR MORE THAN ONE HOUR AT A GIVEN INTERSECTION.

NOTE: WHEN CONSTRUCTING/REMOVING SIGNAL POLE STRUCTURES OR FOOTINGS ADJACENT TO SIDEWALKS, THE CONTRACTOR MAY WORK EACH LOCATION INDEPENDENTLY OR CONCURRENTLY, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. WORK IN A CONTINUOUS MANNER TO PERFORM THE WORK IN THE FOLLOWING SEQUENCE, IN STEPS 'A' THRU 'E'.

A: USING SHEET TMP-7.04 AS A GUIDE, AND AS DIRECTED BY THE ENGINEER CLOSE THE APPROPRIATE SIDEWALK UTILIZING TYPE III BARRICADES WITH SIGNS ATTACHED.

B: CONSTRUCT PROPOSED OR REMOVE EXISTING STRUCTURE AS SHOWN IN THE CABLE ROUTING PLANS AND/OR SIGNAL PLANS. PROTECT PEDESTRIANS FROM OPEN EXCAVATIONS OR OTHER HAZARDS POSED BY INCOMPLETE CONSTRUCTION WORK, BY ONE OR A COMBINATION OF THE FOLLOWING METHODS AS APPROVED BY THE ENGINEER:

- 1) COVER AREA
- 2) COMPLETELY SURROUND AREA WITH AN ORANGE TREE PROTECTION FENCE

C: OPEN SIDEWALK TO EXISTING TRAFFIC PATTERN BY THE END OF EACH WORK PERIOD.

D: WHEN PROPERLY CURED, USING SHEET TMP-7.04 AS A GUIDE, AND AS DIRECTED BY THE ENGINEER CLOSE THE APPROPRIATE SIDEWALK UTILIZING TYPE III BARRICADES WITH SIGNS ATTACHED;

BACKFILL & PAVE, IF REQUIRED, UP TO THE EDGE AND ELEVATION OF EXISTING SIDEWALK (SEE CABLE LAYOUT PLANS AND/OR SIGNAL PLANS).

E: OPEN SIDEWALK TO EXISTING TRAFFIC PATTERN BY THE END OF THE WORK PERIOD.

NOTE: USE RSD 1101.03, SHEET 8 OF 9 (FLAGGERS), TO TEMPORARILY STOP TRAFFIC WHEN INSTALLING MESSENGER AND CABLE OR REMOVING EXISTING MESSENGER AND CABLE OVER A TWO-LANE, TWO-WAY ROAD. USE RSD 1101.03, SHEET 9 OF 9 (ROLLING ROADBLOCK), TO TEMPORARILY STOP TRAFFIC WHEN INSTALLING MESSENGER AND CABLE OR REMOVING EXISTING MESSENGER AND CABLE OVER A MULTI-LANE ROADWAY.

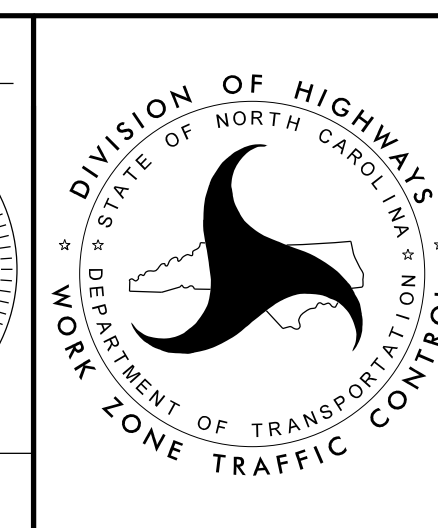
STEP 2: UPON COMPLETION OF THE PROJECT, REMOVE ALL WORK ZONE TRAFFIC CONTROL DEVICES.

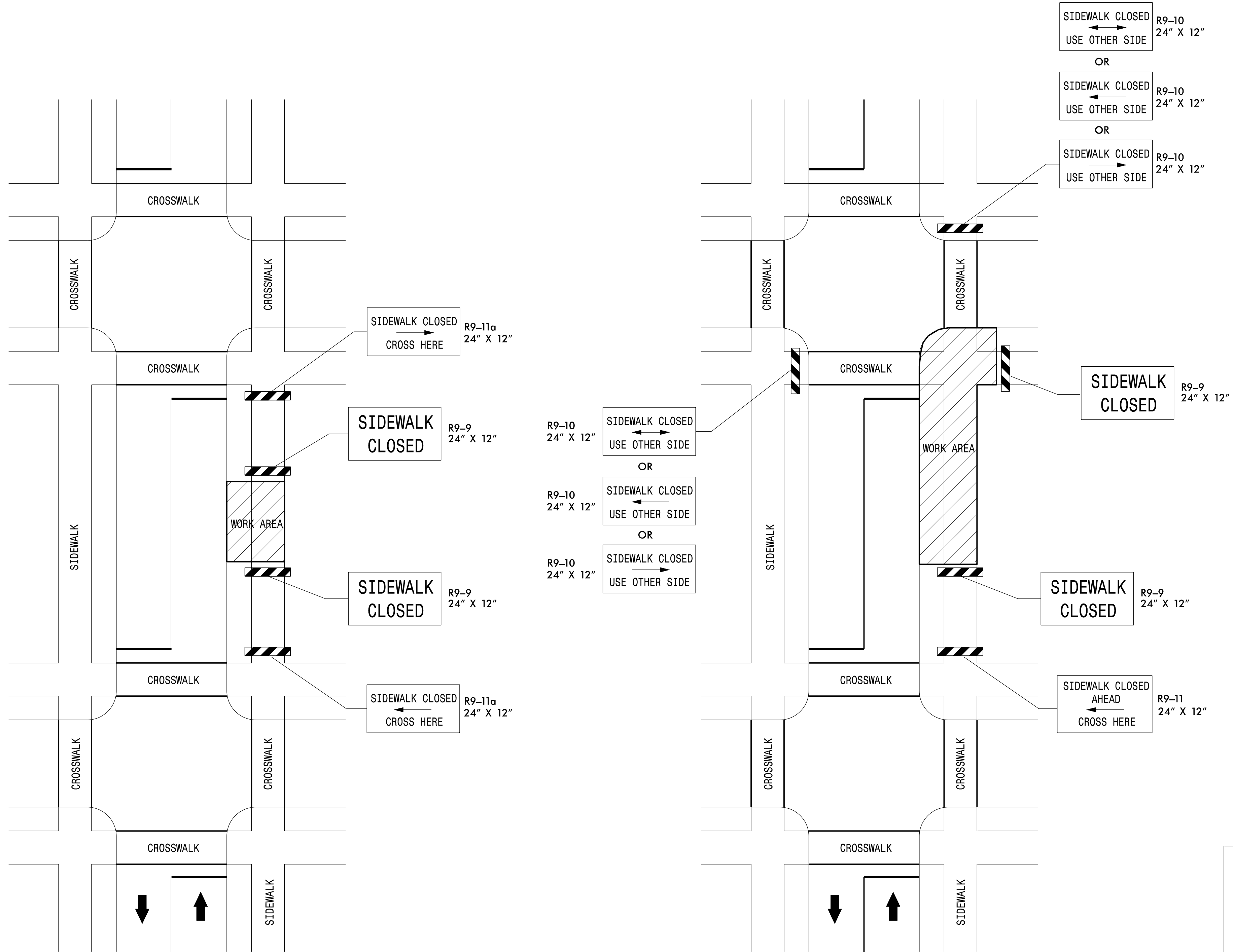
16-JUL-2018 16:29 167314113-coms-projects\USRLA\Transportation\Traffic\U-6015 B-G Sig Sys\Task IL_Typ_SD\TMP\U-6015_TC_TCP_7.03.dgn ALEXANDER, PAMELA

DocuSigned by:
APPROVED: *Pamela Alexander*
E79605AF48384AA
DATE: 7/16/2018

SEAL
023489
PAMELA L. ALEXANDER
ENGINEER

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**





TYPICAL DRAWING FOR
SIDEWALK CLOSURES

NOTE
USE AND MODIFY AS DIRECTED
BY THE ENGINEER FOR WORK
REQUIRING THE CLOSURE OF
A SIDEWALK

LEGEND

 - TYPE III BARRICADE

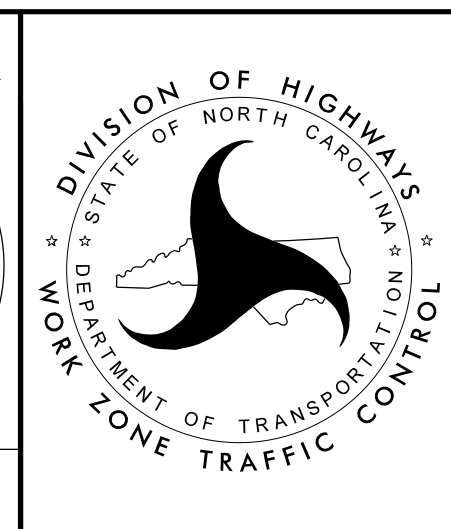
12-JUN-2018 13:54 I:\Projects\18051\18051-00056469 U-6015 B-G Sig Sys\Task II_Typ_SDW\TMP\U-6015_TC_TCP_7.04.dgn
ALEXANDER, AT LUS340649

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

APPROVED: *Pamela Alexander*
DATE: 6/12/2018

DocuSigned by:
E79005AF48384AA

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



**TYPICAL SIDEWALK
CLOSURE AND
PEDESTRIAN
DETOUR**